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Food, Drugs and Drink,
—THE—

**PUBLIC ANALYTICAL JOURNAL
AND SANITARY REVIEW.**

SATURDAY, FEBRUARY 11, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

IS THE AMENDED FOOD AND DRUGS ACT TO BE ANOTHER FARCE?

TO-DAY we enter upon the second half-year of our existence; and, looking backward, we can congratulate ourselves upon having been the means of good work for the public being done in numerous counties and boroughs where heretofore apathy has been king, and fraud its minister. Between the conscientious public analyst and that scientific-analytical-laughing-stock,—Somerset House, we have intervened for the public benefit, and however harsh our criticisms may have been, they have been as much needed as they were incontrovertible. We say this with confidence, because during our six months' existence not one letter has reached us from Public Analyst or Food and Drug Inspector disagreeing with our strictures, whilst hundreds have been sent us corroborating our condemnation of that blundering department; and we have further the gratification of knowing that scandals in its administration have been by our exposures removed. The earnest Sanitary and Food and Drug Inspector has found in our journal what we hope it will ever remain—a firm fearless friend; and magistrates who have been guilty of foolish decisions, inadequate fines, and who have hampered the work of the Analyst, Medical Officer of Health, and Inspector, have been told in as plain terms as we could employ that they were enemies to their fellow-men and to human progress.

Whilst we can look with legitimate pride to the increasing number of prosecutions of fraudulent or dangerous articles of

food that have followed our exposures of imposture, we cannot but recognise that great hardship and cruel wrong is done to many honest grocers by the existing imperfect Acts, the blame for which is cast short-sightedly and unjustly upon the Public Analyst and the Food and Drugs Act Inspector, and no small share of it upon ourselves. We object to such blame, inasmuch as we claim that the Public Analyst and the Food and Drugs Act Inspector are the best friends, not only of the public, but of the honest grocer. It is not the Analyst or the Inspector who is inimical to the grocer, it is the Adulteration Acts themselves. As they now work the real culprit escapes, whilst the retailer, who has neither the skill nor will to defraud his fellow-creatures is proceeded against, and loses character and custom. There is, of course, a panacea offered—the warranty—but in the public interest, as well as that of honest retailers, this remedy is worse than the disease. Numerous as are the cases in which retailers have escaped punishment by having a warranty of purity, there are none in which the person who gave the warranty was punished for his swindling. The wholesale dealer or manufacturer who practices fraud on a colossal scale is the real person whom the Acts should reach. The maker of adulterated mustard, cocoa, butter, or lard, has one great advantage over the retailer—he sits often in parliament, and by pretending a sympathy with the retailer that he is far from feeling, and by skilful lobbying he prevents his thievery being properly punished. Grocers ought not to forget that the Food and Drugs Acts were passed by a House of Commons that did not contain one retailer, but was composed of wholesale manufacturers, brewers, and other interested persons by the score, many of them reaping fortunes by fraud, and therefore having every interest in the maintenance of it. The grocers, therefore, who ally themselves with manufacturers act a very stupid part. It has long been the policy of so-called trade journals to hoodwink the retail grocers. This policy it is that has often led grocers to regard the Public Analyst and the Food Inspector as their enemies, whereas, on the contrary, these officials are at once the best friends of the upright trader and of the public. The able address by Mr. Otto Hehner, of which we print a portion in this issue, points out much more clearly and feasilably the path for grocers to tread than does the insidious thief-inspired advice of trade organs that are sold body and soul to large advertisers who make swindling articles. We commend the address to all who really wish well to the grocery trade, and especially to those members of parliament who are credited with the intention of bringing in an amended Food and Drugs Act. There has been more than enough of worthless Acts, and if the Food and Drugs Act is to be dealt with by the present House of Commons, those who understand the most about Food and Drugs, i.e., the Public Analysts ought to be the first to whom would-be legislators should apply for an opinion. Were such advice taken and adopted, a creditable workable Act would be obtained, and one that would defend every honest trader as thoroughly as it would punish the dishonest ones.

BORACIC ACID IN AUSTRALIAN BUTTERS.

Shippers of butters from Victoria have, we gather from our contemporary, *The Meat Trades Journal*, been warned that they must moderate the use of preservatives if they do not wish their butters to get into bad repute in London. This is rather astonishing news, as we were informed by one of the largest importers only last week that the Australians were too guileless to indulge in any such practices.

THE ANGLESEA COUNTY COUNCIL have decided to petition the Minister for Agriculture to use his influence in promoting a bill to compel vendors of foreign and colonial butter, cheese, and meat to label it as such when exposed for sale.

THE SOCIETY OF PUBLIC ANALYSTS.

MR. HEHNER'S ANNUAL ADDRESS.

The February number of the *Analyst*—the official organ of the Society of Public Analysts—contains the annual address of the late President, Mr. Otto Hehner, from which we take the following, respecting the proposed legal limits for

COFFEE AND CHICORY MIXTURES.

It behoves us to point out at the present time, when legal limits are proposed to be fixed by Act of Parliament for coffee and chicory mixtures, that it is in the present state of knowledge quite impossible to say for certain within 5 per cent. more or less, or 10 per cent. altogether, how much chicory a certain mixture may contain. Both coffee and chicory vary far too much in composition, as regards almost every one of the constituents upon which the analyst usually relies, to allow of anything like an absolutely accurate determination. These differences were good enough while it was not a matter of very much consequence to arrive at the exact composition, and where no injustice was the result of a more or less erroneous report, so long as the fact of admixture of chicory was really proved beyond doubt. But when the analyst is called upon, as he may shortly be, to say whether a certain sample contains 49 per cent. of chicory or 51 per cent., the former percentage being legal, the latter illegal, it must be at once acknowledged that our knowledge fails.

There can be but one way to get at these small differences, and that is, the absolute separation of the coffee from the chicory by mechanical means, and their separate analysis. Similar remarks might be applied to our knowledge of mustard, cocoa, all the spices, and every natural article.

THE BRITISH PHARMACOPEIA then evoked this scorching and merited comment:—

Then there is the very large field of drugs, of the variation in chemical composition of which very little indeed is known from the point of view of the public analyst. Excepting a limited number of chemical drugs, as I may call them, the whole pharmacopœia is a dark continent to the chemist. There is hardly an extract or a tincture of the pharmacopœia that is analysable, except in the very crudest manner. I strongly hold that it is the duty of the State to see that officers appointed under one of its laws shall also be furnished with the means of carrying out their duties. Yet the authorities who composed that remarkable work, the "British Pharmacopœia," appear to have been utterly ignorant of the very articles which they admit into their pharmaceutical bible, and the unfortunate analyst is expected to do that which the authors of the "Pharmacopœia" themselves have carefully avoided. Why, in the present state of knowledge, the analyst should be expected to pronounce definitely upon, say, a sample of compound tincture of rhubarb, or of lobelia, or of hops, or of pellitory, or of scores of others which may be sent to him by an inspector under the Food and Drugs Act, or on any medicine or mixture of medicines, none of which may have an active or characteristic ingredient, or whose ingredients vary within wide and undefined limits, is more than I can comprehend. Yet such impossible work may lie within our province. If we had a Government fairly intelligently advised in such matters, such a Government would see that the analyst's duties should be practicable. The "Pharmacopœia" itself should by rights contain exact definitions, not only for the pharmacist, but for the chemist, of the articles it includes, and the State should give the means whereby they could be tested. It would be as absurd to send out an army without arms and boots and clothes, as to appoint the army of public analysts without giving them the weapons wherewith to fight the enemies of pure food and drugs. In Germany there is the Reichs-Gesundheits-Amt, that more or less supplies the necessary weapons, but here we are expected, for the beggarly fees which we receive, not only to do the routine work of analysing and giving an opinion based on the results, but also to work out our methods of analysis, no matter at what expenditure of labour and money, time and thought. And when satisfactory methods have been worked out, does a grateful country thank the zealous officer, who thus gives his brains and time, energy and money to the public without even asking for a recompense? No; we all know that every magistrate or sheriff sits in judgment over us, declaring, as happened quite lately in Scotland and also in England, that he knew as much about the merits of the lactometer in comparison with chemical analysis as the analyst himself. And do the authorities which are set immediately above us—Somerset House and the Local Government Board—help in furnishing us with our fighting weapons? Again, we all know that this is not only not the case, but that every obstacle is placed in our way, and every means of discouragement adopted. And yet, I hope that public analysts in general and this Society in particular, will not swerve from the path they have adopted, and which has already, in spite of all, led to great and good results. There are remedies for the present state of things, which I will venture later on in this address to suggest to you and which I hope will be taken into serious consideration by those in authority.

But, apart from purely public analyst work, untilled fields surround us and call for labour. For many years the chemist has been satisfied, in analysing animal and vegetable products, to split them up into broad groups of constituents; such as oil—that is, ether extract; albuminous matter, that is, nitrogen multiplied with a more or less arbitrary figure; acidity, that is, standard acid used multiplied with another arbitrary figure; and so on. Surely the time has come when such crude distinctions should be abandoned and an en-

deavour made to obtain definite scientific information. Each of the divisions of matters would afford a life-work to a number of chemists. But it would carry me altogether outside the limits which your patience and my time set me, were I to enlarge upon these almost untrodden fields. Once more I appeal to our members—and the Society is not only a Society of public analysts, but of analytical chemists—to see that they progress with the times. Routine chemists are not wanted; really scientific thought and labour are imperatively necessary. The time of bottle-washer-chemistry has gone by, never to return.

DR. CAMERON'S FOOD AND DRUGS AMENDMENT BILL AND WARRANTIES.

Your council have had before them during the past year a number of matters of great importance to public analysts. We were threatened with a bill to amend the Sale of Food and Drugs Act, introduced by Dr. Cameron, which, if it had passed without alteration, would have brought the Food Acts to a definite stop. It was proposed in the bill that every invoice given by one trader to another, should be considered a warranty under the Act. But inasmuch as the Act does not render the prosecution of the giver of the warranty or invoice-warranty compulsory, and no prosecution of a giver of any warranty has ever, so far as I know, taken place, every fraudulent vendor would have produced in court a paper exonerating him, and incriminating nobody. The council interviewed Dr. Cameron, and recommended that public analysts should embody protests against the introduction of such a principle into his bill, in their quarterly reports to their authorities, and a number of County Councils saw the danger and prepared themselves to take every step in their power against such a Bill passing into law. I am glad to think that Dr. Cameron has since seen proper to amend his Bill in this direction. The Bill also contained clauses regulating the sale of mixtures of coffee and chicory, clauses which were quite unworkable, and the mischievous tendency of which was promptly pointed out by the President of the Local Government Board in an interview with representatives of the coffee trade.

EXTENSION OF ANALYSIS TO MANURES AND FEEDING STUFFS.

During the year there took place some deliberations of a departmental committee of the Board of Agriculture, on the subject of passing an adulteration Act concerning manures and feeding stuffs. Several members of the Society gave evidence before a Committee of the House of Commons, with a view of preventing an Act analogous to the Food and Drugs Act being passed, and I am glad to think that the committee's report is opposed to the Agricultural Adulteration Act. Extensions of the Food Acts are certainly most desirable, as has been pointed out years ago by Mr. Allen and Mr. Cassal, but the whole Food Act requires revision before public analysts could consent to load themselves with additional duties on the same conditions as those imposed by the parent Act.

THE SCANDAL OF COMBINED APPOINTMENTS.

Representations have been made by the Council to the Local Government Board against the very unfortunate practice of some local authorities of combining the appointments of medical officer of health and of public analyst in one. But very few medical officers have the chemical knowledge to become efficient public analysts. There are some brilliant exceptions, such as are afforded by the president-elect, and by our past-presidents, Drs. Adams and Hill; but as a rule the average medical officer is not capable of doing the work of the public analyst in a manner creditable to himself or to the chemical or the medical professions. We public analysts have quite enough to do to keep up with the advances in chemical knowledge, and the medical officer has quite as much to do to keep abreast of medical science. The local authorities who thus combine the appointments do so solely for reasons of so-called economy. They want to force the medical officer to do also the work of the public analyst without any, or without adequate, remuneration. One large town in the Midlands obtains analyses of seven or eight hundred samples per annum, representing a value of seven or eight hundred guineas, at the expense of the salary of an assistant to the Medical Officer of Health. This is intelligible from the "Vestry" point of view, but cannot be fair to the chemical or the medical professions. I have every reason to know that the best section of the medical profession is opposed to such a mischievous practice by vestries and councils, and would be very glad to see it put an end to. I am sorry to say that the correspondence which we have had with the Local Government Board has not so far led to a satisfactory result, but we shall continue our efforts in this direction. Ignorant vestries and boards may honestly think that a medical man may in cases be an efficient public analyst, but those of us who have had to do with the training of the medical student must know otherwise. In the end, no doubt, the separation of the two appointments will be obtained in every case. But it is essential that we, who are public analysts, shall show that we do represent a profession, that we are not mere amateurs, but life-long students, and that we will not do the work unless we are recognised as the medical profession is and has long been recognised. We may at present be paid like policemen or sanitary inspectors, but if each of us determines to be the authoritative adviser of his appointing authority without fear or favour, surely the time must come when we shall be listened to with as much respect as the medical officer is. Our work represents to the country the protection of monetary and other interests amounting to the greater part of the nation's earnings, and until we estimate ourselves at our proper value we must not wonder if vestrymen and councillors do not think highly of the services of the public analyst. Your council have felt that by the admission of unqualified men into the ranks of

the public analysts, the aim of the Society has been retarded, and they have given their serious attention to the question of instituting a qualifying examination by which the knowledge of any candidate may be judged. In Canada, no analyst can be appointed until he has undergone examination before a special examining board appointed by the Governor in Council, and until he has obtained from such board a certificate setting forth that he is duly qualified to perform the duties attaching to the office of analyst (the Canadian Adulteration Act 48-49 Vict. c. 67). In England, the vestry or the local council is the judge of the qualification of the analyst, and the Local Government Board confirms, I believe, in every case where no special objection is lodged and sustained. But in order to obtain a colourable qualification, intending candidates for the post of public analyst become members either of this or of the Chemical Society, although the membership of either at present in no way shows the qualification of the member. Although the deliberations of your council have not yet been carried to a conclusion, I am sure all qualified members of the Society will hope that ere long a scheme which will afford a means of showing the qualification of each public analyst will be properly worked out and enforced. It cannot be in anybody's interest to see inefficient men, or such as have gone through a few weeks' course of drilling in the laboratory of an analyst, appointed to official and responsible positions; men who can perhaps mechanically make an analysis, so-called, of milk or water, but whose opinions are not worth having when given. Nothing but proper study, spread over years, can give the necessary knowledge and qualification. The Institute of Chemistry, which ought to be the proper qualifying body, has a Charter which does not admit of our objects being carried out under it, and in my opinion, and in that of the majority of your Council, this Society owes it as a duty to the public and to its members to undertake the work to which I have referred. It must be remembered that the analyst, once appointed, is the sole official chemical authority for a district, and the public have to go to him, whether he be competent or not, for advice and chemical help. Until, therefore, there is absolute security that the analyst is really efficient, the confidence which ought to be reposed in him will never be generally established. I sincerely hope that we shall have the hearty support and co-operation of the Society in bringing about this much-needed reform.

THE SOMERSET HOUSE SCANDAL

is let down to our thinking rather more lightly than it should have been, the trafficking by the referees themselves in the sale of food and drugs, the "sweating" in the case of the Salford effluents, the private analysing and testimonialising for traders, being we suppose, mercifully left unrefereed to, but the address amply justifies the attitude we have had to adopt since this journal was established towards Somerset House. Mr. Hebner says:—

For many years, indeed ever since the passing of the Food Act, the relations between public analysts and Somerset House have not been of that cordial character which, in the public interest, should obtain between officers working under the same Act of Parliament. The Somerset House chemists undoubtedly fulfil one most useful function, namely, the correction of errors and analysis, which must, unavoidably, occur now and then, and against which there must necessarily be some authority to refer to. In the early days of the working of the Food Act, when experience was small, it was also well that some check should exist to prevent incorrect and unwarrantable conclusions being drawn from analytical data. It is to the credit of Dr. Bell and his colleagues that they have thus proved to be the regulators, as it were, of the analytical machine. Had it not been for the check thus imposed by Somerset House, our methods of analysis (especially of milk, which for years was analysed by a very bad and unscientific method of analysis) would probably not have become what they are at the present time. But having said this, I regret that I cannot go further and credit Somerset House with any measure of cordial co-operation in our work. Upon public analysts alone has fallen the work of elaborating chemical methods, although, as I have taken occasion to point out before this evening, it is no function of theirs to supply the methods of analysis necessitated by their work. Upon them, also, has fallen the great labour of elaborating, upon the basis of an enormous number of analyses, the standards and limits from which to judge of the purity or otherwise of any articles submitted to them for analysis. They alone, not only unaided, but thwarted by Somerset House at every turn, have had to uphold satisfactory standards of quality for important articles of food, such as milk. When analysts of large experience find their views opposed by referees, doubtless acting from a strong sense of duty, but who have not one tithe of their experience; when they see that instead of what they believe to be broad and just views being taken, exceptional samples, which we all acknowledge to occur now and then, are ferreted out and held up as patterns whereby all other articles of the same class are to be judged; when they further see that conditions which are justly imposed upon them by the Act, referring to the state of the samples when analysed, are set at naught by the referees, it cannot well be wondered at that, with all desire to work in harmony for the public weal, they have not accustomed themselves to look upon Somerset House with any great amount of pleasure or enthusiasm. In the first years of the working of the Act collisions between public analysts and the referees were frequent, not often resulting in favour of the correctness of the views of the latter; but gradually a settled state, of what I cannot describe otherwise than despair at a hopeless state of things, took hold of analysts, and they, against their better knowledge and belief, shaped their certificates in accordance with the views prevailing at Somerset House. Samples of milk and of butter were and are daily passed as genuine which the analyst honestly believes to be adulterated, but

which he cannot venture to condemn because he knows that, on reference to Somerset House, they would be pronounced to be genuine, or at least certified upon in ambiguous terms. The analyst came to the conclusion that it was not only useless to uphold his own views and to certify accordingly, but that it was injurious to the public interests to place himself in a position from which the authority of the referees might dislodge him and discredit the working of the whole Act. If, instead of milks being passed, as they daily are, with 2.5 per cent. of fat, or 8.3 per cent. of solids-not-fat, analysts, with the cordial support of the referees, had condemned them, the whole country would by this time be the gainer; bad breeds of cows would have vanished, injudicious feeding would have been given up, adulteration as a fine art would not have become possible, and every honest milk dealer would have rejoiced. If American States can pass laws laying down a minimum of 12 or 12½ per cent. of total solids for milk as in Wisconsin, New Jersey, Minnesota; or, like Massachusetts, give the standard set by the "British Society of Public Analysts" the sanction of its law; or forbid, like Pennsylvania, the feeding of cows with distillery waste, it appears very remarkable, to say the least, that we, the analysts of the country that passed the first anti-adulteration laws, should be debarred, by the action of Somerset House, from adhering to our own limits, limits which are followed by analysts over the rest of the civilised world. I am firmly persuaded that had it not been for the circumstances to which I have referred we should long ago have done better, instead of worse, than the States to which I have referred. But, as I have stated, we resigned ourselves to what appeared a hard fate, until some months ago the Council of the Society once more made an effort to induce Dr. Bell to abandon the position which his department had taken up. We addressed a letter to him, which was signed by almost every public analyst of standing in this country, and by other members of the society interested in the Sale of Food and Drugs Act, and which, therefore, may be taken to contain the almost unanimous expression of opinion of all British public analysts. We asked, in a respectful manner, that the form of certificate issued by Somerset House, which, while presumably intended to be unbiassed and judicial, had really a most harmful effect upon the magisterial benches to whom the certificates were addressed, should be abandoned, and that in doubtful cases Somerset House should state frankly that the results were compatible with the views taken by the public analyst; and that, in fact, a straightforward position should be taken up, without favour to anyone, either be it the trade or the analyst. We asked, further, that the practice of analysing milk which had, in consequence of keeping, undergone changes in composition, should be definitely abandoned. The public analyst is obliged, by the schedule appended to the Act of 1875, to say specifically whether the article, when analysed, had or had not undergone any changes that might interfere with the results of the analysis. Should the analyst state that a sample of milk analysed by him was decomposed, had fermented, or even become sour, would any bench in the kingdom condemn a vendor upon the analysis of such a sample? But Somerset House, though working under the same Act as ourselves, consider that they are not bound by the schedule, and habitually analyse milk which no public analyst who values his reputation would touch, much less certify upon. This was the essence of the letter which has been in the hands of each one of you. I much regret that Dr. Bell has not seen his way to accede to our requests, and that, as to the first point, he declines to alter the form of his certificate, and that, as regards decomposed milk, he alleges that he never analysed any milk which was, in his opinion, decomposed past satisfactory analysis. I need but state these facts, without much personal comment of mine, to bring you to the conviction that Dr. Bell has not well understood his duties to the public, or his obligations to his co-workers under the Act. We have cases on record in which the analysis of a milk when fresh, conclusively showed, upon the Somerset House limits themselves, that watering had taken place, but in which upon being analysed at Somerset House after a lapse of some weeks, was returned as genuine: the decomposition undergone by such samples had been smaller than usual, if one can speak of a "usual" amount of decomposition, and hence the constant allowance added to the analytical figures brought up the solids-not-fat too high, and thus made the sample appear genuine. We have had at least one other case, in which the decomposition was greater than it ought to have been according to Dr. Bell, is greater, I feel tempted to say, than the official amount of decomposition—the result being that the unwatered sample was declared to be watered by the referees. But it requires no cases and no argument to show how entirely fallacious any set time allowance need be, even if every pains are taken to estimate the amount of acidity and of alcohol produced during keeping. We cannot prescribe the number and kind of organisms which determine the extent and kind of decomposition and the circumstances vary in every single case.

Yet we should not allow ourselves to fall into a state of hopeless despondency at such a sorry state of matters, for indications are not wanting that the public themselves are tired of the condition of things produced by the attitude of our referees on the one side, and 150 or more public analysts on the other. We would gladly bow to the directions of chemists of acknowledged scientific authority; but when we believe, rightly or wrongly, that many public analysts have more experience and knowledge of the subject of food analysis than the referees, we are bound to make every effort to bring about an alteration. It would, of course, be far better, and in thorough harmony with our wishes, if such alteration could be effected by mutual consent; but if this be impossible, as I personally believe it to be, it is our duty to work for the best obtainable state of things without regard for the sensibilities of individuals.

ANALYSTS' REPORTS.

MR. CHARLES E. CASSAL, Public Analyst for the Parish of St. George, Hanover Square, in his report for the quarter ended on the 31st December, 1892, says:—

"1. During the quarter ended on the 31st December last, I have received for analysis 101 samples of food, consisting of 40 samples of milk, 20 of butter, 12 of lard, 12 of olive oil, 6 of rum, 5 of brandy, and 5 of whisky, which have been submitted by Mr. C. H. Dyke, Inspector, and of 1 sample of bread, which was submitted by a private purchaser."

One sample of milk had a minimum of 3 per cent. of water, another 15 per cent. of the fat abstracted, and the third contained boric acid. Three were returned as inferior, and of the 34 genuine ones but 22 were of good quality, 10 were fair, and 2 were poor. The Parish of St. George's, Hanover-square, looks well after the Acts, and the result is seen in the fact that Mr. Cassal says:—"It is to be noted that the number of samples found to be of good quality is unusually high."

"Of the 11 samples of butter reported as 'adulterated,' 1 contained at least 20 per cent. of foreign fat (fat other than butter fat), and 10 contained boric acid compounds. In previous reports, the reasons which make it necessary to certify samples of butter containing boric acid as 'adulterated,' have been fully stated. It is considered by many that the addition of boric acid compounds to butter ought not to be regarded as an adulteration, and it is only fair to state the fact. This circumstance may, no doubt, lead to the innocent employment of these substances. The presence of boric acid in butter is of less importance than it is in the case of milk. A Public Analyst, however, has, at present, no option in the matter, and in the Statutory Report, such articles must be placed in the 'Adulterated' class."

"Three samples of spirits (brandy, rum, and whisky) reported as adulterated were below the legal strength. The following are the particulars of these cases:—(a) Brandy, 31.08 under proof; (b) Rum, 29.89 under proof; (c) Rum, 26.48 under proof. The limit of strength fixed by the Sale of Food and Drugs Amendment Act of 1879 is 25 under proof for brandy, rum, and whisky. Inasmuch as a limit of strength is fixed by Act of Parliament, it is plain that any spirit, even slightly below the limit, must be reported as adulterated. The case of the sample of rum (c) is one in which the deficiency in strength is not great, but the sale of such a spirit constitutes an offence under the Acts."

"I am informed that action was taken in the cases of adulteration as shown below, the particulars being inserted in this report for the sake of convenience:—

Sample.	Adulteration.	Action Taken.	Result.
Milk ..	15% fat abstracted..	Vendor summoned..	Fined £1 and 2s. costs.
Milk ..	3% water ..	Vendor cautioned ..	
Milk ..	Boric acid ..		
Butter ..	20% Foreign fat ..	Vendor summoned..	Fined £5 and £1 3s. costs.
10 Butters	Boric acid ..		
Brandy ..	31.08 Under proof ..	Under consideration	
Rum ..	29.89 Under proof ..	Under consideration	
Rum ..	26.48 Under proof ..	Under consideration	

"The report of Mr. A. W. Stokes, public analyst to the Vestry of Paddington, for the quarter ended 31st December last, shows that the inspector has submitted during the past quarter 62 samples of food for analysis. These comprised:—Milk, 27 samples; tinned meat, 7; spirits, 6; coffee, 4; butter, 4; lard, 4; pepper, 4; beer, 4; and tea, 2. Of these, 3 samples of milk and two of coffee proved to be adulterated. In two cases, where 15 per cent. of cream had been abstracted from milk samples, no proceedings were taken; the vendors, however, being cautioned not to repeat the offence. In a case where 20 per cent. of water had been added to a milk, a sample of which was purchased in the streets on a Sunday, the magistrate, Mr. Cooke, ruled that full evidence must be produced that the man selling the milk was the servant of the man whose name was on the barrow. Hence he dismissed the case. One sample of coffee contained 80 per cent. of chicory; here the vendor pleaded that he had only just taken over the business, and did not know that the article was adulterated. The magistrate, Mr. Cooke, again dismissed the summons. The vendor of another sample of coffee containing 90 per cent. of chicory was fined 25s."

"The sale of coffee, remarks Mr. Stokes, is in a very anomalous state. You are invited to "Try our celebrated one shilling coffee!" If you do so, you probably find, on reading through the printing on the package, that it is described as a "Mixture of chicory and coffee." Analysis shows the chicory to form usually from 50 to 90 per cent. of the weight. Should you prosecute the vendor, you will find that half the magistrates on the Bench hold that you having asked for "coffee" have a right to have that, and nothing else. The other half hold that you may be served with anything containing some coffee, if only it is labelled "A Mixture," whatever you might have asked for or the vendor have advertised to sell. Had the vendor advertised "Try our celebrated mixture of coffee and chicory!" there could be no cause of complaint. But such advertisements are not to be found at all frequently. The Adulteration Act certainly needs amendment, so that it shall be clearly defined what a label shall or shall not cover in the way of admixture,

Recently a deputation from the grocers waited upon the Local Government Board with a view of amending the Act. Their proposal in regard to coffee was that it should be legal to sell as coffee a mixture containing half its weight of chicory, if only the sample were labelled a mixture. That even 90 per cent. of chicory might be sold as coffee if the proportions of chicory and coffee were given on the label.

"A short summary of the analytical work of the year 1892 shows that a total of 270 samples have been analysed. Of these, 138 were milk samples, groceries 65, butter 20, lard 15, tinned meats 14, jam 8, spirits 6, and beer 4. Of these, 14 samples of milk, 2 of coffee, and 1 of pepper proved to be adulterated. This Parish compares well with others in its freedom from adulterated articles; only 6 per cent. of the food samples show any adulteration, while generally in the Metropolis the proportion is about 15 per cent. Of adulterated articles, 12 per cent. of the coffees, 10 per cent. of the milks, and 5 per cent. of the peppers had been tampered with."

At the last meeting of the Berkshire County Council the following report was received from the County Analyst:—

"My Lords and Gentlemen,—I have the honour to report that twelve samples of spirits have been submitted to me by your inspector during the quarter. Five samples of whisky were adulterated, by dilution with water, below the legal limit, the deficiency of strength being from 2 to 12 degrees; two others were slightly under the standard; three were fairly diluted to the legal standard, and one sample was 10 degrees over. A sample of gin was genuine."

"Three samples of water have been examined, of which two were of good quality."

"The total number of samples taken for analysis under the Act during the year was 45, and during 1891 was 21. The proportion is small in relation to the population, while the percentage of adulteration is over the average for the articles examined. I desire to suggest to the Council the advisability of appointing Inspectors at various important places, such as Abingdon, Faringdon, Wantage, Newbury, Wokingham, and Maidenhead, with instructions to take in each district a definite number of samples periodically.—Your obedient servant,

W. W. FISHER.

"Oxford, 26th December, 1892."

MARGARINE PROSECUTIONS IN DUBLIN.

ABORTIVE APPLICATION TO REMIT FINES.

On the 14th ult., in the Southern Division of the Dublin Police-court, before Mr. Swift, Mr. M. J. Hanmore, solicitor, made application to have certain fines imposed by that magistrate on Messrs. Kenny, Hanlon, and O'Byrne, for having sold margarine as butter, remitted in consequence of a statement by Mr. O'Donnell, in the Northern-court, that he would not convict on the evidence of Inspectors Sheeran and Myers, in consequence of certain evidence which was produced in the course of a case heard by him. The application was first made by the solicitor on Friday, when it was decided to postpone the hearing of it until that day, when Mr. M'Sheehy, law agent to the Corporation, would be in attendance. Mr. M'Sheehy was now present. Mr. D. O'C. Miley, solicitor, watched the case on behalf of Messrs. Sheeran and Myers.

Mr. M'Sheehy, addressing his worship, said he came to court in consequence of a letter he received from Mr. Hanmore and what he saw in the papers. After some time Mr. Hanmore's representative came in, and Mr. M'Sheehy sent for the magistrate.

Mr. M'Sheehy said that Mr. Hanmore's representative had just come in, and stated that Mr. Hanmore was not in town that day.

Mr. Hanmore's clerk said he understood the application was to stand until Monday. But he had met Mr. Harley, B.L., who was in the case, and he told him to inform Mr. Hanmore not to make the application, but to serve notice of appeal. The matter then dropped.

SANITARY PROSECUTIONS.

At West London Police-court, on the 1st inst., George Reed, of 200, Portobello-road, was summoned by Mr. Leete, clerk of the Kensington Vestry, with respect to a nuisance on the premises. The defendant did not appear. Mr. Leete said he not only asked for an order to abate the nuisance, but for one to close the house. A fat boy was exhibited, and the London County Council had urged the Vestry to take proceedings for the closing of the show. Dr. T. Orme Duffield, Medical Officer of Health, said the house was in such a state as to be unfit for habitation. The fat boy was described as being 15 years of age. He was in poor health, and should be removed to the workhouse. Mr. Curtis-Bennett made an order as required, the house to be closed forthwith. He inflicted a fine of £20, to be reduced to £5, if the order was obeyed, with 3s. costs.

George Samwith, of Ledbury-road, was summoned in respect of 6, Wellington-mews. Mr. Leete said the defendant was desirous of doing the work, but was unable to obtain admission to the house. Mr. Curtis-Bennett made an order for the closing of the house, with 3s. costs.

Mr. Tapping was summoned for not obeying an order of the court, for sanitary works, at a house in Cornwall-road. Some of the works had been executed, and the magistrate imposed a fine of £20, to be reduced to £5, with 3s. costs, to be completed before next Wednesday.

HULL AND "SWEATING FEES" FOR ANALYSES.

In a paragraph that appeared in our columns on January 28th respecting the remuneration of public analysts, we made special reference to the "sweating" rate paid for analyses in Hull, and which has been largely commented on by the press, and as a result we have since learned, and we confess it is with considerable surprise, that the £100 per annum paid to the borough analyst covers everything, including, we suppose, chemicals, laboratory rent, apparatus, etc., and the time taken for 388 samples. Other important centres of population adopt much fairer attitudes towards their analysts. For example, Hammersmith possesses only some 97,000 inhabitants, and its analyses reach some 224 samples, but the Vestry a few months ago considered that the then remuneration of £125 was too low, and, we believe, decided to increase it to £175. Hull, with 200,000 population, paying £100 per year for the analysis of 388 samples, cannot be said to be acting other than very unfairly to its public analyst, the rate being little over 6s. per sample, as compared with Hammersmith's 15s. in salary alone. Apart entirely from the sweating thus practised by the Hull Corporation, an injustice is done to the people of Hull. The official report of the Local Government Board says that of one article—butter—only six samples were analysed for the year 1891, and for the year 1892 we see that only two samples were analysed. We commented last week on the fact, as revealed by the evidence in a recent case in the police courts, that £500,000 worth of Irish butter is disposed of by one firm of butter dealers alone in Lancashire and Yorkshire. This butter contains 8 per cent. too much water, which the public pays for at 1s. 2d. to 1s. 4d. per lb. as butter. This one adulteration alone filches the sum of £40,000 per year out of the pockets of consumers, and shows how beneficial and necessary it is that the work of analysts and food inspectors should be thorough. What the Medical Officer of Health is in respect to the safeguarding of society from disease by bad sanitary conditions, is the public analyst to the public in regard to their protection from disease by unwholesome food and from robbery by adulteration. The instance we give above of the amount of fraud in but a small part of the butter trade shows that the Hull authorities are not doing their duty, for, were it otherwise, the number of samples of butter analysed would not be two, but hundreds. The present practice in Hull of taking but two samples of butter, and no samples whatever of bread, flour, coffee, sugar, mustard, jam, pepper, tea, lard, wine, drugs, etc., offers the public no protection from dishonesty, and is grossly unfair to those dealers in food stuffs who would not stoop to swindle the public by vending margarine as butter, or by selling butter with eight to twelve per cent. excess water in it; and this should be self-evident to the corporation. It is their duty to properly enforce the acts for the protection of the inhabitants from fraud, and to bring such pressure to bear upon magistrates that offenders are mulcted in adequate penalties, and the acts thus made self-supporting. Such a course would be more beneficial to the people of Hull than the present one of ignoring the acts, underpaying the analyst, and giving a clear run to any traders who care to plunder their fellow ratepayers.

BOOKS RECEIVED.

THE RELATIONS OF THE DISEASES OF ANIMALS TO THOSE OF MAN. Vol. III. Transactions of the Seventh International Congress of Hygiene and Demography. Eyre and Spottiswoode, London. Price 2s. 6d.

This volume is a reprint of an admirable series of papers of the greatest interest and importance to sanitarians. Parasites transmissible from animals to man are dealt with by Professors Railliet, Alfort, by Dr. Raphael Beauchard Paris; Meat Infections—food poisoning, by Edward Ballard, M.D., F.R.C.P., F.R.S.; Meat and Milk Infections, by Dr. Victor C. Vaughan; Infectious Udder Diseases of the Cow, by Dr. Klein; Dairy Sanitation, by Dr. Ostertag; Meat Inspection, by Dr. E. Salmon and Dr. Francis Vacher; Actinomycosis, by Professor Crookshank; Anthrax, and its relation to workers in various trades, by Professor Chauveau; Veterinary Hygiene, by Professor Fred. Smith, M.R.C.S., F.I.C. Important proposals for reform are made, and the volume is well worth the attention of such of our readers as have not yet possessed themselves of it.

THE FOOD INSPECTOR'S HANDBOOK, by Dr. Francis Vacher, published by the Record Press, Limited, 376, Strand, W.C., is one that would be found very useful by Inspectors. It is well and clearly written, and contains a good amount of useful information. The price is 2s.

FRY'S COCOA.

A CONVICTION AT EDGWARE.

At the Edgware Petty Sessions on the 25th ult., before Messrs. Nelson (in the chair), W. S. Gilbert and Worthington. William Henry Cullen, of Wealdstone, Harrow, a grocer, was summoned for selling cocoa, which was not of the nature, substance and quality demanded, but was adulterated with at least 50 per cent. of starch and sugar, and contained only about one-third of the fat usually present in genuine commercial cocoa. Inspector Tyler, said that on the 14th December he visited the shop of Mr. Cullen, grocer, of High-street, Wealdstone, and asked to be served with a quarter of a pound of cocoa. He was served by Thomas Reynolds, who handed him a packet of Fry's Cocoa. He asked if they had got any loose cocoa. Reynolds said "Yes," and after a little hesitation gave him a quarter of a pound, which he took from a tin. He paid 3d. for it. Witness then informed him that it was purchased for analysis and he had it divided. He now produced one part, together with the original wrapper. He also produced the analyst's certificate which declared it to be adulterated as specified in the summons. By Mr. Roots, for the defence: The analyst was Mr. Bevan, who was the analyst for the whole of the county of Middlesex. The young man hesitated before serving him, and ultimately produced a large tin. He believed it was a square tin and covered with paper. He did not see what was on the tin. He could not say there was not an announcement on it to the effect that this was not sold as pure cocoa. He had not had very great experience in cocoa. He had purchased pure cocoa and believed he had given 4½d. for a quarter pound. The analyst never returned a part of the sample with his certificate. He only produced the sample which he retained.

Mr. Roots, for the defence, contended that the analyst should return a part of the sample with his certificate, and that this and the part retained by the inspector should both be produced. The Act said it must be produced if required by the defendant, and he did require it. The Bench were not quite of the same opinion, and said he ought to have asked Mr. Tyler about it when he was in the box. Mr. Roots said he had asked if the inspector produced more than the one sample, which he contended was sufficient. The Bench, however, decided against him on this point. Thomas Reynolds, shopman to Mr. Cullen, said he served Mr. Taylor from a tin containing about 14 lbs. It was partly covered with paper, which bore on it in large type "This must not be sold as pure cocoa." This was also indented on the tin. The purchaser could see the latter, but not the label. It was his duty to place a label on the cocoa. This was his first day in the shop, which was the reason he hesitated when looking for the cocoa. Mr. Roots submitted that the indentation on the tin was sufficient notice to the purchaser, and this contention had been upheld. The chairman said he was doubtless relying on the case of Higgins and Hall, but in that case the vendor had pointed out the label to the purchaser. Mr. Roots said he was instructed to fight the case on behalf of Messrs. Fry and Sons, because it was their cocoa sold. But the shopman had not put on the label—which they supplied in thousands, and one of which he produced—which declared the nature of the article. If it had been a case of margarine they would have prosecuted the shopman for this neglect, for the sake of their own good name, but under this Act they could not do it. He hoped the Bench would take into consideration that the offence was committed in direct opposition to the shopman's orders.

The Bench said they were distinctly against the first contention, which they considered was wrong in law; and they also considered that if it was required proper notice should have been given, for which there had been plenty of time. They were not at all satisfied with the non-production of the tin. The fact that the shopman said certain words were on it was only partial evidence, and could not be taken as satisfactory, when the inspector said he had seen nothing of them. As for the third point, that the shopman omitted to put a label on against orders, they considered there was certainly something in it. The penalty for these cases was very heavy, but taking this into consideration, they would only inflict a fine of £1 and costs. They did not attach any blame to Mr. Cullen.

ADULTERATED CHESHIRE CHEESE.

The adulteration of cheese has been practised to such an extent, that it is stated on good authority, it has made its appearance in some factories in Cheshire. The subject will be brought before the Cheshire County Council at its next meeting when Mr. George Dixon, in accordance with notice, will call attention to the increasing sale of cheese adulterated with foreign fat and an excessive percentage of water, and with a view to protecting the public against the sale of adulterated cheese, will move a resolution requesting the President of the Board of Agriculture to use his influence in getting a Bill introduced as a Government measure to compel every person dealing in cheese other than the pure article, to brand or durably mark the same with the word "Caserine" in red capital letters not less than three-quarters of an inch square, and further, to compel registration of every manufactory of such article.

CIRCULAR NOTES.

WATER IN IRISH BUTTER.

The deputation from the South of Ireland Butter Merchants' Association that waited upon the Under Secretary about this question, have taken up an important matter none too soon. We cannot be classed amongst those who, like Ireland's Lord-Lieutenant and prominent Irish Members of Parliament, by our actions do all possible to extirpate Irish industries. The same measure of honesty we demand from Danes, Swedes, Germans, or French, we also demand from those dealing in Irish butter and other produce. And there have been few spectacles more disgraceful and nauseatingly hypocritical than those of Irish and English butter dealers, who, whilst practicing the excess water in butter, swindle themselves, and adding margarine to their butters within the limits they rely on as escaping detection, have been loudest in calling out for restrictions upon the sale of foreign produce. They are no friends of Ireland who gloss over such revelations as those at Burnley, or blind their eyes to the fact, that unless Irish butter for the English market be made properly, and no more than 15 per cent., at the outside, of water be present in it, Irish butter will deservedly be thrust out of the market and severely left alone.

THE CHELSEA MEDICAL OFFICER ON MILK ADULTERATION.

At the last meeting of the Chelsea Vestry, the Medical Officer of Health described the process of milk sophistication as follows:—

"Thirty gallons of whole new dairy milk are mixed with 10 gallons of separated milk (milk deprived of all but a very small percentage of fat by means of a mechanical cream extractor or separator.) The mixture now has the fat reduced say from 3.5 per cent. to 2.75 per cent., but the now fatty solids are slightly increased as they are not extracted by the separator. About two gallons of water can now be safely added to the mixed new and separated milk, so as to reduce the non-fatty solids to the proper amount, care being taken not to add enough water to bring the fatty solids below 2.4 per cent. This mixture of new milk, separated milk and water can now be sold as *new whole milk* with impunity. The profit to the dairyman from this manipulation will be about £1 4s. 8d., viz., difference between sale of 42 gallons and 30 gallons of milk at 4d. per quart = 16s.—10 gallons of separated milk at 1d. per quart = 12s. 8d.—12s. For sale of 3 quarts of cream at 4s. per quart = £1 4s. 8d."

ADULTERATION PROSECUTIONS.

MILK.

At the Preston Borough Police-court, on the 27th ult., before Messrs. W. B. Rideal, J. J. Sidgreaves, J. Burrow (in the chair), and E. Greenwood, and Dr. Hodgson, John Knight, farmer, of Fishwick, Preston, was charged under the Food and Drugs Adulteration Act with adulterating his milk. Mr. Blackhurst appeared for the defence, and the Town Clerk (Mr. H. Hamer) prosecuted. Inspector Cave said that he was on duty on the 22nd November last in London-road, for the purpose of examining the milk in that district. He asked Mrs. Knight, who was in charge of defendant's cart, for a quantity of milk, and it was at once supplied. He paid 3d., and informed her that he had bought the milk for the purpose of analysis by the public analyst, Dr. Campbell Brown. He divided the milk into three parts, one of which was forwarded to the doctor, the first being labelled 329, another he kept, and the third he left with Mrs. Knight. The doctor forwarded a certificate showing the milk to contain 8 per cent. of water. Trespass was the usual price for this, which was known as new milk. Cross-examined by Mr. Blackhurst, witness said he knew these Knights, who had been "kitters" to Preston for some years. He asked for milk out of one of the kits, and Mrs. Knight wanted to give it to him out of another, but he would not have it. He took it into a shop and divided it, leaving Mrs. Knight in the cart. Mr. Blackhurst took objection, and said the division should have taken place in the presence of the defendant. Here, however, it was taken into the shop from the cart, and he submitted the case was not proven. Mr. Hamer said that in section 14 of the Act there was nothing about it being divided in the presence of the seller, and he read the section. The Bench reserved judgment pending the hearing of the other cases, and afterwards announced that they would adjourn the case for a week.

At the West London police-court on the 25th ult., Henry Cameron 16, Cobbold-road, Starch-green, Shepherd's Bush, was summoned for selling milk from which forty per cent. of the cream had been taken. Inspector Oakley gave evidence, and said no previous complaint had been made against Cameron, who did not keep a shop, but supplied a limited number of customers. Cameron said he sold the milk as he got it. His worship imposed a fine of 30s., and 12s. 6d. costs.

At Liverpool, on the 1st inst., Daniel Davies, milk dealer, Drayburn-street, was fined 10s. and costs for adding water to milk, and he was ordered to pay costs in a second summons.

At Marylebone, on February 1st, Mark Honour, a farmer, of Weston Underwood, near Olney, Bucks, answered four summonses charging him with having on the 5th of January sent two lots of milk to London, one adulterated with 10 per cent. of added water, and the other 15 per cent., also 30 per cent. deficient in butter fat. The other two summonses were for sending milk on the 11th January adulterated with 15 and 16 per cent. of added water. According to Mr. Ricketts, solicitor, who prosecuted, the defendant was under a contract to supply a certain quantity of milk daily to the Amalgamated Dairies Company. The quantity recently fell short, and complaint was made to the defendant. Then the quantity became most abundant, but unfortunately the quality deteriorated in about the same proportion. The defence was that the cows had been eating turnips instead of grass, and that the milk cooler had leaked. The defendant was ordered to pay £10 ls., or nine weeks' imprisonment in default.

CONDENSED MILK.

At Hanley, on the 30th ult., Thomas Griffiths, Grocer, Market-street, was charged under the Food and Drugs Act with selling condensed milk which was not of the nature, substance, and quality of the article demanded. Mr. A. Challinor (town clerk) prosecuted for the Corporation, and Mr. Sword, sen., appeared for the defence. A sanitary inspector of the borough purchased from the defendant three tins of condensed milk, and, after explaining that they were purchased for the purpose of analysis, sealed the tins up, leaving one with the defendant, sending a second to the public analyst, and keeping the third in reserve. The analyst certified that the sample submitted to him contained only 7.81 per cent of fat, whereas the minimum quantity should have been 10 per cent. Mr. Sword raised a technical objection, contending that the Act provided that every sample purchased for analysis should be divided into three portions, whereas, the inspector had purchased three independent samples, and submitted one of them to the analyst. There was no evidence to show that the analyst's certificate had any bearing upon the sample left with the defendant, or with the one retained by the prosecutor, and therefore the charge could not be sustained. The magistrates sustained the objection, and dismissed the case.

BUTTER AND MARGARINE.

At Liverpool, on the 1st inst., John Bradford was fined 40s. and costs for exposing for sale margarine which was not labelled.

On the 30th ult., Jacob Booth, grocer, Lepton, was charged with selling adulterated butter at Lepton, on the 23rd of December, and also with selling margarine without label or brand on the same date. Mr. A. L. Bridge, food and drugs inspector, Dewsbury, deposed to going to the defendant's shop and asking for a pound of butter. He was served with an article for which he paid 1s., and he then told the defendant that he wanted it for the purpose of analysis by the public analyst. He divided the pound into three parts, one of which he forwarded to Mr. Allen, West Riding analyst. He gave a second part to the defendant, and retained the other himself. He had since received a certificate from Mr. Allen to the effect that the article consisted of margarine as defined by the Act of 1887. There was only a trifling proportion of real butter. The defendant was only in a small way of business, but he (Mr. Bridge) might say that there had been a run of offences of this kind. In every shop he had entered, including the defendant's, he had informed those who sold that they could protect themselves by having a written guarantee with their butter. Defendant, in pleading guilty, stated that every time he had written, he had asked for butter, and it had never been marked on his invoice as margarine. The Bench imposed a mitigated penalty of £1, with £1 ls. costs for the first offence, and the second charge was withdrawn by Mr. Bridge.

On the 30th ult., at the Dewsbury West Riding Police-court, John Braceland, provision dealer, Heckmondwike, was summoned for two offences under the Food and Drugs Act. Tenpence was paid for a pound of "butter." The chemical analysis showed the article contained "a trifling proportion of real butter." Defendant pleaded guilty, and said he told the buyer it was margarine he was selling her, and he had not labelled it, for being just before the Christmas holidays he was very busy, and he had forgotten the matter. The Bench imposed a fine of 40s. and costs for selling the material as butter, and 20s. and costs in addition for not labelling it as margarine, which defendant said it really was.

Allen Rowland Gibbs, dairyman, 171, High-street, Aston, was summoned at Aston Police-court on the 6th inst., for exposing for sale two unlabelled parcels of margarine. On the 12th of last month Mr. Bolt, inspector under the Food and Drugs Act, purchased two samples of what appeared to be butter, the first being labelled, "Choice Dairy," and "Quality guaranteed." The first-named sample, which was sold at 1s. per lb., contained 90 per cent. of foreign fat, and the "quality guaranteed," which was composed of 75 per cent. of foreign fat, was sold at 1s. 2d. per lb. The Bench said the case was a very bad one, and fined defendant £5 and costs in each case.

Thomas Collier, provision dealer, 18, High-street, Aston, was summoned for exposing a quantity of margarine for sale without the same being properly labelled. The defendant, who pleaded ignorance, was fined 5s. and costs.

At Lincoln City Police-court, Joseph Goodale, dairyman, 26 and 63, Sheep-hill, Lincoln, was summoned for having adulterated new milk which was in the possession of his servant, Benjamin Goodale, for the use of sale, on January 1st. Mr. H. K. Hebb, clerk of the Lincoln Urban Sanitary Authority, prosecuted, and Mr. Durance defended. William Smith, a farmer, of North Wykeham, spoke as to

supplying the defendant with milk, and on the day in question his servant was supplied with about 12 gallons of milk. Francis Dalton, High-street, stated that on the day in question defendant supplied him with milk, and while doing so Sergeant Bradley came up and asked for a quart for which he paid 3d. Benjamin Goodale, the servant, said the day in question was a Sunday, and after getting the milk from Mr. Smith he called at four different places on the way home, where he got some milk, all of which was put in the churn. He did not know whether there had been any water added before he received it, but there was none afterwards, and he brought it to Lincoln, and Mr. Dalton's was the first place he called at. Sergeant Bradley stated that when the sample of milk was analysed it was found to contain 10 per cent. of added water. The milk was taken from the churn. For the defence Mr. Durance submitted that the milk was obtained from five different places, and that if it had been watered it must have been done before coming into the possession of the defendant. The magistrates inflicted a fine of 20s., including costs.

COFFEE.

At the Smethwick Police-court, on the 1st inst., George Edward Neale, who trades in Windmill-lane, Smethwick, under the style of the Colonial Stores, was charged under the Food and Drugs Act with selling adulterated coffee on December 30th last. Mr. R. A. Willcock (Wolverhampton) appeared to prosecute, and Mr. Tanner (Birmingham) defended. Mr. Willcock said the defendant on the date in question sold to a purchaser coffee which was not of the quality demanded. On the day named Elizabeth Toy, daughter of the assistant-inspector under the Act, acting on her father's instructions, visited the defendant's shop, and asked to be supplied with a number of articles, including a quarter of a pound of coffee. The latter upon being analysed, was found to contain 73 per cent. of chicory. On the tin containing the article was a label, which ran as follows:—"Pure Jamaica coffee. Caution. See that each packet bears the name of the Colonial Stores. 1s. per lb.; usually sold at 1s. 8d. per lb. Mixed with pure chicory. An ideal breakfast beverage, exhilarating, delicious, and palatable." On the top of the tin there were these words: "This is sold as a mixture of chicory and coffee." He (Mr. Willcock) contended that the mixture was fraudulent, and that the label did not protect the defendant. Mr. Edwin Blakemore, of Wolverhampton (chairman of the Wolverhampton Grocers' and Provision Merchants' Association) stated that the wholesale price of the best Jamaica coffee was 1s. 8d. per lb., and chicory was sold retail at 5d. per lb., so that the mixture of 3lb. of chicory and one of coffee would give 2s. 11d. for the 4lb., or 8½d. per lb. Mr. J. Newey, grocer, Smethwick, said he considered the mixture sold by the defendant was a positive fraud. Mr. Tanner submitted that in the charge there was no allegation that it was a fraudulent mixture, and that defendant came within the exception prescribed by the Act of Parliament. Mr. Calthorpe said Miss Toy asked for coffee, and she did not get it. Mr. Tanner: The label states it as sold as a mixture of chicory and coffee. Defendant was fined £5 and costs, in all £7 9s. 6d. Mr. Tanner asked on behalf of the defendant for a case to be stated for appeal.

Thomas Stafford, grocer, of Lower Cross-street, Smethwick, was fined £4 6s. 6d., including costs, for selling a quantity of coffee adulterated with 74 per cent. of chicory, on the 30th December last; also for selling butter adulterated with 91 per cent. of margarine, and failing to label the same in his shop.

For selling coffee adulterated with 58 per cent. of chicory, Mary Ann Williams, of Thomas-street, was fined £1 4s. 6d., including costs.

SPIRITS.

At the South Western Police-court, on the 1st inst., before Mr. Biron, G. H. Higerty, of the Windsor Castle Hotel, St. John's-hill, Battersea, was summoned by the Vestry of St. Mary, Battersea, for selling to Chief Sanitary Inspector Isaac Young, on the 30th December, 1892, brandy which was adulterated, the same being under proof, also for selling whisky which was adulterated, the same being under proof. Solicitor for the defendant pleaded guilty, excusing his client on the grounds of his advanced age and bad eyesight, he had no intention of defrauding the purchaser, and broke his spirits down himself. A previous conviction was, however, proved against the defendant, he having been fined 40s., and 12s. 6d. costs for selling to Inspector Young, in December, 1891, adulterated whisky. The magistrate, after cautioning the defendant as to the future, and advising him to employ a competent person whose eyesight was good to break his spirits down, imposed a penalty of 40s. in each case, and 25s. costs.

At the same Court, Messrs. Rhodes and son, of the Colossus Distillery Stores, Battersea Park-road, were summoned for selling to Inspector Young, on the 30th December, 1892, brandy and whisky which were adulterated. The defendants did not appear, but were represented by their manager. Inspector Young proved purchasing the samples in accordance with the provisions of the Sale of Food and Drugs Act. Mr. Biron, the magistrate, imposed a penalty of 20s. upon each summons, and 25s. costs, remarking that a future offence would bring a much heavier penalty.

Mr. Wilson, of the Clerkenwell Distillery Stores, York-road, Battersea, was summoned for selling to Inspector Young, Scotch whisky, on the 30th December, 1892, which was adulterated, the same being under proof. Solicitor for the defence pleaded guilty, remarking that his client had left the stopper out of the bottle or barrel, it being busy Christmas time, and so the spirit must have evaporated. His client was a most careful man, and had never before been fined or intentionally defrauded the purchaser, and he hoped his Worship would only inflict a very nominal penalty. The

Vestry's solicitor here pointed out these were distillery stores, but defendant's solicitor said it was only a name upon the facia, and that had the inspector taken Irish instead of Scotch whisky it would have been well above the limit of strength of 25 degrees under proof. Mr. Biron imposed a penalty of 20s., and 12s. 6d. costs, remarking a heavier penalty would be inflicted in a further offence.

At Caerphilly Petty Sessions, on the 31st ult., George Davies, landlord of the Colliers' Arms, Nantgarw, was fined 10s. and costs for selling to Acting-sergeant Dagg a quantity of whisky 32 degrees under proof. Mr. J. Phillips (Pontypridd) appeared for the defence, the police being represented by Superintendent Wake.

At Norwich, on the 4th inst., Charles Frederick Stevens, publican, of West Pottergate-street, was summoned for selling to Mr. Joseph Brooks, the sanitary inspector, through the agency of Hannah Stevens, adulterated brandy, on the 16th ult. The Town Clerk appeared for the prosecution, and defendant pleaded guilty. The Town Clerk stated that defendant kept the West Pottergate Street Stores, and was charged under the Food and Drugs Act with selling brandy which was not what was demanded. On January 16th the sanitary inspector, who was the officer under the Food and Drugs Act, went to the defendant's shop and bought half-a-pint of brandy for 1s. 10d. He left a third of the pint with defendant, kept a third himself, and sent the other third to the public analyst. Mr. Crook analysed the brandy, and stated that it was 39 degrees under proof. If defendant had sold it as a mixture of brandy and water, everybody would have known what it was, and that would have been a good defence. When a person was convicted of selling adulterated spirits the magistrates could endorse the license, but he did not wish to press the case at all. Defendant said he always thought he was allowed to put water into spirits, and he had a card in the bar stating that they were diluted. Inspector Brooks deposed to purchasing the brandy. He divided it into three parts, and took one to Mr. Crook, who certified that it was 39 degrees under proof. He looked well round defendant's bar, but could not see any notice. Stevens was sworn, and produced a card which had been hung up in a prominent position in the bar for the past two years. He believed that a circus bill had lately been hanging over it. The card stated that all spirits sold over the counter were sold as diluted, and the prices were regulated accordingly. He had only sold four half-gallons of whisky during the time he had been in the house.

Ann Brown, publican, of St. Peter's, Mancroft, was summoned on the information of Joseph Brooks, the sanitary inspector, for selling him whisky which was not of the nature, substance, and quality demanded by him, in consequence of an admixture of water, which reduced the whisky to 37 degrees under proof, on January 16th. The Town Clerk appeared for the prosecution, and Mr. E. Reeve defended Mrs. Brown, who pleaded not guilty. The Town Clerk stated that defendant was landlady of the Wounded Hart public-house, and on the day in question the sanitary inspector called at her house and purchased half-pint of whisky, for which he paid 1s. 6d. The officer divided that sample in the ordinary course, as required by the Act of Parliament, and left one-third with Mrs. Brown, kept one-third himself, and sent the other third to the public analyst. He told defendant he had purchased it to have it analysed. Mr. Crook had analysed the sample, and he found that it contained spirit 37.25, and water 62.75. His certificate stated that the whisky was reduced to 37 degrees under proof, and that the ingredients were not injurious to health. Inspector Brooks gave evidence of purchasing the liquor, and produced Mr. Crook's certificate. In cross-examination he said he thought 1s. 6d. for half a pint of whisky was a fair price. He had never paid 1s. 9d. He looked for a notice in the bar and cast his eye round the room, but could not see it. He did not ask for the notice. Re-examined: On the same day he bought two other samples at other houses and paid 1s. 4d. for each of those samples. In answer to the Town Clerk witness said that one of the samples was 37 or 39 degrees under proof. Mr. Reeve, in defence, said that publicans were allowed to dilute their spirits if they hung up a notice in the bar informing customers. The notice in Mrs. Brown's shop was, "All spirits served in this establishment are diluted; the prices charged being regulated according to strength." She added 1½ pints of water to a gallon of whisky and ¾ of a pint to a gallon of gin, and made reductions on the price of both. If she hung up the card where everybody could see it, she did not commit an offence. Her daughter was a dressmaker, and the other day she unfortunately hung up a card over the notice. The defendant was sworn, and said she had lived at the Wounded Hart about two years. The notice had been up in the bar all that time, but about five weeks ago her daughter accidentally covered it up with a dressmaking card. If the whisky had not been diluted she would have charged the inspector 1s. 10d. The Bench were unanimous that there was no intention to deceive the public. It seemed to be the common practice in the trade to sell spirits and whisky diluted with water. It appeared that the notices were hung up in Norwich, and in both these cases they were undoubtedly hung up, but were covered over. The Act had not been entirely complied with; but, at the same time, as these were the first cases of the kind, the Bench would dismiss them on payment of the costs of the analysis. They wished to give notice to publicans that these notices must be hung up in some way so that people may see that the spirits which they were buying were mixed with water.

LIQUORICE.

At Liverpool, on the 1st inst., Mary Jones, 59, West Derby-road, was fined 1s., and 15s. costs, for selling impure liquorice. Inspector Baker stated that he bought two pennyworth of liquorice at the defendant's shop which on analysis was found to contain 15 per cent. of wheat and potato starch and 25 per cent. of worthless fibre and other vegetable matter.

CONDENSED, SKIMMED MILK.

ANOTHER IMPORTANT PROSECUTION.

AN APPEAL TO BE MADE.

At the Ystrad Police-court, on the 30th ult., Mr. Enoch Davies, grocer, Treherbert, was summoned under the 9th section of the Food and Drugs Act, for selling a tin of condensed milk, known as the Swiss Dairy Brand, containing, according to the public analyst's certificate, 7 per cent. of genuine good milk and 93 per cent. of skimmed milk. Mr. W. R. Allen, solicitor, Cardiff (Deputy-Clerk to the County Council) prosecuted, and appeared on behalf of the County Council, and Mr. Kenshole, Aberdare, represented the Condensed Milk Company, Limerick. Superintendent Jones deposed that he visited the defendant's shop and asked for a tin of condensed milk, and was supplied by the defendant's wife. The public analyst's certificate showed that the contents consisted of 93 per cent. of skimmed milk and 7 per cent. of genuine milk. He considered the value of the tin of milk to be about $\frac{1}{2}$ d. Mr. Kenshole again aired the opinions he ascribed to Professor Brown, and which we dealt with in our issue of January 28th. They were speedily dissipated by Dr. Williams, D.P.H., Oxford University, and M.O.H. Glamorgan county. Mr. W. R. Allen, examining Dr. Williams, said:—

In your opinion would an abstraction of fat to the extent of 93 per cent. from milk affect the quality injuriously? Most decidedly. Mr. Allen: You have heard stated, among other things, that this stuff is useful for all household purposes; do you consider that a fact? Witness: I don't. Mr. Allen: Would pure milk used exclusively as an article of diet for children or infants up to the age of five or six months be proper diet? It is the right and proper diet. The Stipendiary: In what respect is this label to be understood, as it states that this milk is useful for all household purposes? Dr. Williams: It is not useful for all household purposes. For instance, in the bringing up of children it is not useful. Pure milk of cows would be the proper diet up to the age of six or seven months. The Stipendiary: Up to the age of six or seven months this condensed milk would be an improper diet? Yes. Mr. Allen: How would it affect a child up to that age? Witness: I don't think it would live for six or seven months. (Laughter). A child fed on that would pine away and become emaciated and die. Mr. Allen: Is it not an ascertained medical fact that the abstraction of butter fat, or rather that not giving oleaginous matter as food to children of that age would bring on disease, notably rickets? Witness: Yes. Mr. Allen: Does an excess of sugar in such a compound as this, render the substance much less digestible? Witness: Yes, when you put a great amount. Mr. Allen: I suppose oleaginous matter is most digestible? Yes; and when you take it away you render that food less digestible. Cross-examined by Mr. Kenshole: What proportion of the constituents of milk would butter fat be? Witness: About 3.5 per cent. Mr. Kenshole: Now, of course, Dr. Williams, you don't suggest, I take it, that skimmed milk is not a nutritious article? I do. Mr. Kenshole: To what extent? Milk deficient to the extent of 93 per cent. of butter fat is not a nutritious article. Mr. Kenshole: To what extent would you go to make it cease to be nutritious? Till it ceases to be the right and proper food to bring up children or infants. Mr. Kenshole: Now, then, would you agree with this (reading from a volume)—“If muscle-forming food is desired, then obviously the milk which has the largest proportion of albuminoids is one to be preferred, and it must be evident that the material from which the greater part of fat has been removed is of a higher nutritive quality for the purpose of muscle-forming than the richest unskimmed milk”?

The Stipendiary: After taking away the butter fat we have been told that the article becomes less digestible, therefore it won't do so much good as when the albuminoids are present. Mr. Kenshole: I will take the answer. Dr. Williams: Muscle-forming is impossible unless you get the other ingredients as well. Mr. Kenshole: Of course you have not in any way analysed this material?—No, sir, not in any way. Mr. Kenshole: Now I put this question to you Dr. Williams—would, for instance, delicate stomachs be able to tolerate a preparation of condensed milk if it were pure cream? Witness: Yes. Mr. Kenshole: You don't agree with this, that many delicate stomachs would not tolerate much cream?—No, I don't. Mr. Kenshole: Then may I take it from you that children up to six months old could take whole cream?—They never do. Mr. Kenshole: Not whole milk?—It is always diluted with water.

The result of the case was that the stipendiary decided that under the 9th Section of the Food and Drugs Act, there was sufficient disclosure, but he expressed his satisfaction at learning that the Glamorgan County Council were resolved to get the opinion of a superior court. A case was accordingly stated for the Court of Queen's Bench.

FALSE WEIGHTS.—At the Lambeth Police Court on the 18th ult., Leonard Castle, an oilman, of 140, Acre-lane, was summoned by Inspector Strugnell, on behalf of the London County Council, for having in his possession four measures which were unjust. Inspector Strugnell proved the case, and said the defendant was doing a good business. Mr. Biron imposed a fine of £5 and costs.

BAD MEAT.

At the Guildhall, on the 25th ult., Thomas Chinn, farmer, Borough Bridge, near Bridgewater, was summoned for sending to the Central Meat Market, three quarters of beef, the same being diseased and totally unfit for human food. Mr. Vickery prosecuted on behalf of the Commissioners of Sewers, and Mr. Hutton defended. Dr. W. Sedgwick-Saunders, Medical Officer of Health, said the meat was in an emaciated condition, and showed evidence of tuberculosis. There were also signs of considerable adhesion of the lungs to the ribs, as there had been some scraping by a blunt instrument. Mr. Hutton: Is it not possible that in some cases the meat of beasts suffering from tuberculosis is fit for human food? Dr. Saunders: No, it is an absurd proposition. Mr. Hutton: Has it not been a question of debate? Witness: Yes, amongst persons interested. Mr. Hutton: I mean amongst persons of your own profession. Dr. Saunders: No. The Alderman: Such meat is not fit for food. The Witness: Never. Mr. Hutton having addressed the Court on behalf of his client, the Alderman said he did not think accused knew the meat was bad, but guilty knowledge, under this Act, was not necessary for a conviction. He thought the justice of the case would be met by a fine of 40s., and £10 costs.

BILLS BEFORE PARLIAMENT.

Two Bills have been introduced into the House of Commons, dealing with the marks of origin of foreign goods. One, brought in by Mr. Seton-Karr, Colonel Howard Vincent, Mr. Tomlinson, Mr. Stock, Mr. Cayzer, and Mr. Ernest Spencer, seeks to prohibit the importation of all imported goods “which do not bear in a legible and conspicuous form a definite indication of the country in which such goods were made or produced;” and that no such goods shall be exposed or offered for sale in the United Kingdom, “unless by means either of express notice, or by a board, card, label ticket, invoice, or other document, the purchaser be made aware that such goods have been imported, and are not of home production.”

The second Bill, introduced by Colonel Howard Vincent, Sir H. Howorth, Mr. Spencer, Mr. Maclure, Mr. Joseph Wilson, Colonel Bridgman, Mr. Johnston, and Mr. Seton-Karr, is to precisely the same effect.

A Bill has been brought in by Sir Albert Rollit, Mr. Hobhouse, Mr. Whitmore, and Mr. Arthur O'Connor, to amend the Weights and Measures Act, providing that a borough which is the local authority for the purposes of the Weights and Measures Act shall be paid by the County Council of the county in which the borough is situate, once in every year the proportionate amount contributed towards the expenses incurred by the County Council in the execution of those Acts within the borough. The purpose of the Bill is to relieve certain boroughs from contributions to county expenses.

WEDNESDAY'S PRODUCE MARKETS.

CORN.—The general tone of the London market remained unchanged. At Mark-lane English and foreign wheats were held for fully previous rates, and very little trade was done. Barley steady but quiet. Maize unchanged in value. Oats steady at Monday's rates. Flour quiet. Beans and peas slow. Arrivals of grain this week:—English and Scotch: Wheat, 200; barley, 500; oats, 520; beans, 100 quarters. Foreign: Wheat, 4,940; barley, 5,200; oats, 27,890; peas, 2,290; beans, 170; maize, 7,940; flour, 12,640 sacks.

LONDON CENTRAL MEAT.—Beef supplies fair of Scotch, English, and town and Liverpool-killed American, with 1,250 hind and 380 forequarters refrigerated. Trade slow, but steady. Mutton supplies fair and equal to demand, which is moderate without essential change in rates. Veal quotations rather dearer. Pork trade fairly firm on moderate supplies. Beef: Scotch sides, 3s. 8d. to 4s.; shorts, 4s. to 4s. 4d.; American refrigerated hindquarters, best, 3s. 4d. to 3s. 8d., average, 3s. 6d.; seconds, 3s. 2d. to 3s. 8d., average, 3s. 5d.; fores, 2s. 4d. to 2s. 8d., average, 2s. 5d. Mutton: Scotch, 4s. 4d.; English, 3s. 10d. to 4s. 2d.; New Zealand, 2s. 9d. to 2s. 10d.; Sydney, 2s. to 2s. 3d. Pork: Small, 5s. to 5s. 4d.; large, 4s. to 4s. 8d. per 8lb.

SUGAR.—A steady market, with a fair amount of business passing. Cane sorts steady in value. Beet firm for near months, but rather weaker for distant. Refined goods sold at previous rates for standards, and full prices for pieces. Foreign refined quiet. Tate's cubes, firsts, sell at 21s. 3d.; seconds, 20s. 9d.; crushed, firsts, 18s. 6d.; seconds, —. Liverpool crystals, firsts, 19s. 6d.; small, 19s. 3d.; seconds, 19s.; granulated, 18s. 6d. Martineau's cubes, firsts, 20s. 9d.; seconds, 19s.; titlers, 19s. 3d.; pulverised, 19s.; chips, 18s. 6d.; granulated, 18s. 3d. per cwt. Sales of beet about 2,000 tons.

TEA.—The general tone of the market is quiet. China and Ceylon descriptions tend rather in buyers' favour. The small quantity of Indian in auction sold with a better competition. London Produce Clearing House quotations of good common China congou:—February, 6 7-16d.; March, 6 7-16d.; April, 6 8-16d.; May, 6 6-16d.; June, 6 6-16d.; July, 6 3-16d.; August, 5 12-16d.; September, 5 8-16d.; October, 5 6-16d.; November, 5 4-16d.; December, 5 4-16d.; January, 5 4-16d. per lb. Sales registered, 4,500 half-chests. Fair whole-leaf Indian: February, 8 2-16d.; March, 8 3-16d.; April, 8 4-16d.; May, 8 4-16d.; June, 8 1-16d.; July, 8d.; August, 7 5-16d.; September, 7 12-16d.; October, 7 8-16d.; November, 7 2-16d.; December, 7 2-16d. per lb. Sales registered, 3,000 chests.

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Food, Drugs and Drink, —THE— PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, FEBRUARY 18, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

SOMERSET HOUSE AND THE PUBLIC ANALYSTS.

AN IMPORTANT STEP.

THE reply of the Somerset House Referees to the too mildly worded protest of the Society of Public Analysts against the incompetent analyses and misleading certificates of the Somerset House chemists is before us. It is an ingenious one, and as artfully concocted a piece of special pleading as we remember

ever to have seen, but it is not convincing, nor does it exculpate the Government department from the grave charges advanced against them. It reminds us of the case of the Scotch malefactor, who eloquently pleaded his cause before a shrewd Scotch judge. His lordship listened patiently, and to the malefactor's intense delight, appeared to be deeply impressed by the arguments of the culprit, but at the conclusion disappointed the criminal's hopes by quietly observing, "Eh! mon, but you're a clever chiel. I'm thinking, however, you'll be none the waur for hanging."

We have no doubt whatever that personally the departmental chemists are most estimable gentlemen, and in their analyses of gin and beer they may be accurate enough for fiscal purposes, but as regards food analyses we are, metaphorically of course, entirely of the Scotch Judge's opinion that they will be none the waur for hanging, and the sooner Parliament takes food analyses out of their hands and puts it into competent ones, the better for manufacturers, analysts, grocers, and the public.

A pure food supply is far too serious a question to allow of trifling with, or of mistakes being made. The loss to England in butter alone, occasioned by the want of knowledge of butter analysis evidenced by the Government department, would pay the cost of a very well-equipped Ministry of Public Health and of a State endowed department for analytical research, for it amounts at the very lowest calculation to half a million pounds sterling per year, nearly every penny of which goes into the pockets of Dutch, French and German butter merchants, who put only just as much margarine into their so-called pure butter as public analysts dare not condemn, because the Government referees, who do not understand food analysis, would proclaim it genuine.

In regard to milk, the fraud is of far greater magnitude, and so also in well nigh every article of food. The money thus robbed from the public, and the damage done to English trade in numerous branches, are, therefore, not compensated by the subtle reply of Somerset House to the public analyst's protest. Who accuses Somerset House? One hundred and nineteen members of the Society of Public Analysts, including everyone who has added anything to the science of food analysis, and able scientists whose reputations are world-wide, and whose knowledge of food analysis is gained from the analyses of over 29,000 official samples yearly, and probably as many more private samples. Against this united indictment by public analysts, Fellows of the Royal Society, physicians, medical officers of health, three Somerset House chemists, whose knowledge of food analysis is gained from 40 samples yearly, and who have never been heard of in the world of scientific research, place a width of red tape. Had the Somerset House chemists been scientists of note, such an attitude would be intolerable, being, as they are, chemists of proved incapacity, their specious refusal is an insult to science, and an injury to every class of the public. In the face of this contemptuous refusal on the part of Somerset House, the meeting held in the Chemical Society's rooms on Wednesday last was as necessary for the dignity of science, as it was for the protection of the public from fraud. It was to be expected that Somerset House chemists would make some defence of their attitude. They were invited to attend the meeting, and in the discussion had ample opportunities. Let it be placed on record that in a discussion in which such experienced legislators as Dr. Cameron, M.P., far-seeing agriculturists like the Hon. H. E. Taiton-Egerton, M.P., and keen and able representatives of the wholesale grocery trade like Mr. H. E. Kearley, M.P., joined along with the public analysts and experts, who have carefully watched and noted the defects of the present laws and relations between public analysts and Somerset House, not one

speaker was able to urge an argument in favour of the Somerset House referees. The public press, along with the scientific press, has condemned the department, science has now clearly proclaimed to the world the unfitness of the Somerset House chemists to meddle with food analysis which they do not understand. It remains for Parliament to pass sentence. Only one sentence is possible. Their powers as referees under the Food and Drugs Act must be taken from them, and a duly constituted chemical department of the Local Government Board be created, with chemists of knowledge and fitness at its head, who would be placed in direct relation with the public analysts. Such a department would advance analytical knowledge, be alert to gather information from foreign scientists as to new forms of fraud, and make public analysts in this country aware of those that are the most ingenious and difficult of detection. The country would gain by such a course millions of pounds yearly, and, in the interests of the whole community, it is to be hoped that Parliament will be quick to establish such an authority, and to make such amendments to the existing Acts as the important meeting of Wednesday suggested.

MR. HEHNER'S ADDRESS

To the Society of Public Analysts.

(Continued from our last issue)

PROPOSALS FOR REFORM OF THE FOOD AND DRUGS ACT.

Now that wily emissaries of fraudulent traders innumerable are spreading their nets to entrap those M.P.'s who wish to amend the existing Acts, we would impress upon the would-be reforming M.P.'s the following remarks on the defects of the existing Acts:—

The defects of the Food Act, and the hardships which it entails to the retailer, have been largely discussed by the provision trade during the past year, and it must be very evident, even to the casual observer, that changes must and will be made in the law as it now stands. No workable means have yet been proposed. There is much dissatisfaction among retailers, in that upon them falls all the burden and punishment for the sale of an adulterated article, although the offence may be, and in many cases is, entirely due to the wholesale house or to the manufacturer. In the case of proprietary articles, which are sold in packets, the contents of which cannot be interfered with by the retailer, there cannot be any good reason why the summons should not be made returnable against the manufacturer or the wholesale house instead of against the innocent retailer, as soon as it is proved that the latter sold these articles in the same state in which the wholesale house supplied them. But in the case of articles sold loose, which afford no proof of identity, such as milk, butter, cocoa, coffee, pepper, &c., the matter is far more difficult. It is hard upon the retailer to be summoned for an offence which he has not committed and against which he cannot well guard himself; on the other hand, the wholesale dealer cannot and will not take upon himself the responsibility for loose articles when they have once passed out of his hands, for he has no means of assuring himself that the retailer has not himself tampered with them, or substituted others for them. Between the retailer and the wholesale house any prosecution would be sure to fall to the ground if divided responsibility were accepted, as is now often urged by the trade.

If then, as it appears on all sides, an alteration in the law is demanded, namely, by the public, who urge that in many cases the law is a dead letter, and that there are no means of enforcing it; by the retailers, who justly complain that the law is all against them, and that it saddles them with responsibility which often should lie with others; by public analysts, who are handicapped in every way, hampered in their work, ignored by their appointing authorities and by many members of the bench; and by vestries and county councils, who when they do work the Act, often do so most unwillingly and fitfully, it may be pardoned me if, as your president, I also venture upon a number of suggestions, the outcome of a good deal of thought and experience, in which I have endeavoured to embody all that appears to me best of the many suggestions made by vendors and others interested in the matter. For, after all, the analyst, through whose hands go the samples of a number of counties, under the present Act representing widely varying circumstances—and who, at the same time, is often in intimate contact with the trade, and listens to the many suggestions and complaints made to him—must know better where the shoe pinches than the representative of any single interest or any single member of Parliament, who relies, perchance, upon the representations of some sanitary inspector. But, knowing that many interests are involved, I bring forward my proposals solely as suggestions, in the hope that some of them, at least, may be of use.

The want of uniformity among analysts and in the working of the Act is continually commented upon. This society has done its best to induce its members to take up as uniform and reliable methods of analysis as the present state of analytical science allows, and it has, I think, fairly well succeeded in this. But there are hardly two authorities in the country who work the Act uniformly and consistently. Times out of number has the Local Government Board pointed out that, while in some cities or counties the utmost vigilance and even severity is shown, in very many others the Act is not worked at all, the officers being appointed with the full intention of not utilising them at all. The first thing necessary, therefore, is a central authority, which should not only be able to grumble, like the Local Government Board, but also to enforce. Whether this central authority be the Local Government Board or the Ministry of Agriculture matters not much, although a good deal is to be said in favour of the latter department of the Government, as adulteration affects agricultural interests far more than ordinary commercial ones. But I will assume that the Local Government Board, as hitherto, would be the guiding authority for the working of the Act. In order to enable that department to give due weight to its recommendations it should, as in the case of medical officers of health, pay part, say one-half, of the expenses of carrying out the Act, and receive an equal share of any fines which may be imposed or of other monies received. There should be a chemical officer of the Local Government Board, precisely as there are medical officers of the department, who advise local authorities in all cases of difficulty, and who help and guide the Board and its officers. The chemical officer of the Board would also have the responsibility of any chemical matters that might come before the Board, such as water supply, sewage treatment, poisoning cases, &c., which matters are now though largely chemical, left entirely in the hands of medical advisers. It is time that the chemical profession should be distinctly and not merely very indirectly represented in a Government Department. Such an officer would be solely an adviser, not a practising chemist. He would have to be a man of authority, whose word and knowledge could be relied upon, and whose work would be recognised by all sections of chemists throughout the country. He should not be chosen, as Somerset House has been chosen, solely for the sake of cheapness and convenience, the Inland Revenue Laboratory being the only Government laboratory which existed at the time the Food Act was passed. The chemical officer should select a number of analysts and other chemists as assessors, chosen for their special knowledge in the various departments of chemistry coming before the Local Government Board, but who would not be permanent officers. This Chemical Board would have to issue in the form of regulations, alterable from time to time, standard methods of analysis to be followed by the public analyst, for all must have recognised by this time that figures obtained in food analysis depend largely upon the precise details of the method of analysis followed, and that all standards and limits which have been or may be fixed, can be based solely upon definite modes of procedure. They would also have to lay down limits and standards for various articles, to be altered by regulation, as any material advance is made in our knowledge. Other Governments have adopted this course. The Swedish and German Governments, for instance, not unfrequently issue regulations for the guidance of the analysts working under their laws, with precise and even the most minute details. No method of analysis and no limit should be embodied in any Act of Parliament, for Acts of Parliament are rigid and require years of agitation to get them altered, if the necessity for alteration arises. Any analyst devising a new and perhaps improved method of analysis would bring it before this Chemical Board in the full confidence that it would be fully and fairly considered, and without the fear of seeing printed in parliamentary blue-books reports totally at variance with the expressed opinions of the chemical advisers, as in a case within my personal knowledge.

This chemical officer, being in contact with all similar departments of Governments throughout the world, would be in a far better position to know what was going on in other countries than public analysts, and would be able to give early intelligence of new forms of adulterations springing up abroad. Had we had such a central guiding officer, the adulteration of lard with cotton oil, for instance, which flourished for some years before an English analyst found it out and brought it into general notice, would have been scotched much sooner than it actually was, for the American Government had the matter actually under consideration before we English analysts were aware even of the addition of cotton oil to lard.

If the Local Government Board paid part of the expenses of executing the Act we should get rid of two of the weakest points of the Act, namely the insufficient number of samples taken by some authorities and the beggarly fees sometimes paid. The matter is not, let me plainly say, a money or fee question at all, but every labourer is worthy of his hire, and the public analyst having scientific and responsible work to perform, should not have to battle with some well meaning, but intensely ignorant authority, consisting perhaps of dairy-farmers, who have heard that somebody or other analyses milk for a trumphy fee and forthwith expects the public analyst to do the same. Many public analysts, especially local men, with not too much of worldly goods and dependent largely upon their official work and what hangs around it, unwillingly give way, and the result is that the work is done at fees which are not sufficient to cover the salary of the laboratory boy, with the immense amount of responsibility thrown into the bargain. I cannot think that a professionally-advised Board would encourage this sort of thing. We should, secondly, get some uniformity in the number of samples analysed in various districts. Year after year the local Government

Board Reports show that certain towns and districts set the Act at defiance. In London, St. Martin's-in-the-Fields, in the country, Herefordshire, West Suffolk, Montgomery, and Radnorshire did not take any sample at all in 1891, nor did no less than 27 boroughs, all branded by the Board, without avail, as malefactors to their inhabitants. And there are quite a host of other towns where the number of samples falls altogether short of reasonable requirements. It is not too much to expect, surely, that one sample should be taken for every 1,000 inhabitants, as the Local Government Board recommends. To my thinking, a better mode of proportioning the work, would be to regulate the number of samples taken by the number of vendors of articles of food and drugs existing in each district. In towns the proportion of these is larger than in rural districts. Were there few vendors of food in any district it would be unreasonable to require many samples to be taken. From the census of 1881, the latest one available, I have compiled for some boroughs and counties in which I am specially interested the number of such vendors. Thus in Nottingham there is one vendor to every 41.11 inhabitants, in Nottinghamshire one to 47.96, in Derby (borough) one to 41.61, in Derbyshire one to 53.99, in Sussex one to 37.22. Assuming that to each establishment belong four persons on the average, I calculate that in Nottingham there are 1,136 establishments for the sale of food, drink, and medicines, in Nottinghamshire 2,286, in Derby 483, in Derbyshire 1,789, and in Sussex 3,569. At the rate at which samples are at present collected and submitted to analysis in these districts a lifetime almost must elapse before each vendor is reached even once, that is to say, till one sample only be taken from each separate establishment. And when it is considered that each vendor deals in a number of articles, almost daily renewed, which are liable to adulteration, it should be obvious to the meanest understanding that the present working of the Food Act is utterly absurd and stupid, and that the small measure of moral influence produced is at least counteracted by the immense chance of non-detection. And if the Local Government Board cannot enforce its recommendations there is no hope whatever that the present state of things will be materially altered.

I would further put into the proposed Act, that the public analyst be chosen as hitherto by the local authorities and approved by the Local Government Board, with the understanding that only such men be appointed as have proved themselves to be qualified for the work. At present these things are managed by the very objectionable system of testimonials. I have seen testimonials given to candidates, by men who could not have the faintest knowledge of the duties of the public analyst; by professors, eminent in their departments, but not analysts; by medical authorities; by members of Parliament; and others. If the examination scheme, which I alluded to earlier in my address, were passed, as I hope it will be, and recognised by the chemical adviser of the Board, we should have the assurance that whatever the local influence of any candidate might be (and local influence will always remain an important factor), no inefficient man, no mere amateur, would be appointed. Even the most competent man may make a mistake, and where many samples are annually analysed there will always be a few mistakes, but no cases of gross incompetency—which give all opponents of the Act an excuse for crying out against the whole system of food examination—would occur.

Proper officers should be appointed whose duty would be the collection of samples. At present, police inspectors, well-known to every inhabitant of their districts, are largely employed. Police officers have their hands quite full enough with other work, and only undertake sample collection with great reluctance. Sometimes inspectors of nuisances or inspectors of weights and measures are the collecting officials, but these also, admirably as some of them perform their work, are full of other, and to them more important and congenial work. It would be as unreasonable to expect police officers to be inspectors of nuisances, or inspectors of weights and measures to perform detective work, as are the present requirements of otherwise occupied officials. The mode of collecting samples might otherwise remain the same. The division into three parts is just and fair, but the vendor should have the right of appending his own seal also, together with that of the inspector to each part of the sample. No single individual should have the responsibility thrust upon him of holding another man's reputation in his hands. Special regulations, binding upon all inspectors, should be issued by the chemical officer of the Board and his assessors for the proper putting up of the collected samples. At present samples are often secured in the most flimsy manner. I have had samples which could be readily removed from their packages without the breaking of any seal. I have seen coffee and mustard packed in papers which had soaked up much of the fat, so important to the analyst; spirits in wide-mouthed bottles with ill-fitting and porous corks, allowing of any amount of evaporation; I have had samples wrapped in arsenical paper, samples insufficient in quantity, like four ounces of beer, and monstrosities of all kinds. At present there is no means of regulating all this: each officer acts as he likes and sometimes resents any attempt at interference. There should, further, be special regulation as to the division of samples like seidlitz powders, medicines, and aerated beverages, which at present cannot be divided under the Act without rendering analysis impossible. The principle upon which the Act should be founded should be, that every purchaser should obtain the precise article for which he asks, unless he is distinctly and clearly informed at the time of the purchase that the article demanded is not kept in stock. A mere label, therefore, should be no protection to the vendor if the label is not in accordance with the demands of the purchaser. Verbal notice should be given in every case, for some people may not be able to read, and others may not read the label at

all. If, in my household, the servant is sent to the buttermilk man to get some butter, it is no use to me if the grocer sends margarine with a label intimating the fact. The servant does not bring the wrapper every time to me for my inspection. People may at first be offended if the grocer says that he has no tennepenny butter, but only margarine at the price; they may like to appear to be buying butter, when all the time they wish for margarine, but they would soon learn better if they found that every trader gave them the same kind of notice. But if a label be appended to an article, I would hold the tradesman responsible for the accuracy of the description on the label. It is, I am told, the habit of some establishments to wrap all butter or margarine in margarine wrappers, to go quite safely under the present Act. I would punish a vendor for selling pure butter in a margarine wrapper, because the practice is plainly one intended to cover every fraud upon the ignorant and unwary. All mixtures should have on the label the proportion of the ingredients, excepting in the case of proprietary preparations, which may be composed of substances or made up in proportions which it might not be fair to require to have stated. But in these cases I would let the vendor omit to state the constituents and their proportions at his peril and on his responsibility. Every third portion of each sample taken, should, as at present, be retained by the inspector. In the case of milk, the only article so perishable that, if any check analysis is to be made, it must be made quickly and before decomposition has set in, I would make it incumbent upon the analyst to report within one week, or even within four days of the receipt of the sample, a report to be sent both to the inspector and to the chemical officer of the Local Government Board if it is found to be adulterated. In that case the inspector would immediately forward his portion of the sample to the chemical officer of the Board, by whom it would be preserved by heat sterilisation, or be opened in order to receive a proper amount of some preservative like chloroform, carbon disulphide, potassium bichromate, or other suitable antiseptic in exactly ascertained quantity, and there again sealed up for reference if required, should a dispute arise. In that case the sample would be sent to one of the chemical officer's assessors, a man specially experienced in milk analysis, and who could speak on the matter with authority, to be analysed by him, provided always that the assessor should not be interested in any way in the particular case. If, therefore, the assessor were a public analyst, as would be probable, no samples from his own districts could be sent to him for reference, and therefore for each article two assessors would have to be appointed, one as principal, the other as deputy, in cases such as that referred to. If a dispute arose in any other article, the sample would also be sent to the chemical officer, and would be placed by him in the hands of another suitable referee. In this way each article would be judged under the recognised rules of the department as to method of analysis and standard adopted, by men specially experienced in each special article. I would, for instance, rather have a drug referred to Dr. Muter or Mr. Davies, a sample of wine to Dr. Dupre, one of oil to Mr. Allen, one of milk to Dr. Vieth, Mr. Richmond, or Mr. Faber, than any of these to the present referees without special experience in any single department. Thus we should once and for all get rid of unseemly disputes, and the trades as well as the analyst would have due protection and the best advice obtainable. The summons should in every case be returned against the actual vendor, who, if he alleged that he did not commit the offence or acted in ignorance, might be required by the Act to state this to the inspector serving the summons, whereupon for the vendor's protection the inspector would take a sample of the same article next delivered to the retailer by the wholesale house, before it was touched by the retailer, obtain an analysis which, if it proved unfavourable, would exonerate the retailer, but would incriminate the wholesale dealer, while in the contrary case the retailer would be summoned for the former sample and punished. As the wholesale house would be quite ignorant of the result of the first analysis, they would have no chance, should they really be the guilty parties as alleged by the retailer, of sending a specially pure article, and the retailer would not only have no interest, to put the wholesale dealer upon his guard, but the contrary, as he would make the punishment come upon himself. In this manner, I think, the retailer as well as the manufacturer would be duly protected, at the least possible inconvenience to himself or cost to the authorities. No firm given to adulterating their goods does so only occasionally, but rather as a matter of principle and daily, in the hope, which is at present but too often realized, that the fraud will not be detected, seeing that the inspector can come but very rarely indeed. On the other hand, mistakes which may occur in the best-regulated businesses, such as the accidental substitution of margarine for butter, would be more or less distinguished from intentional fraud.

I know, that in many minds there is an objection against any form of centralisation, and justly so, but, having regard to the working of the decentralised Food and Drugs Act during the last seventeen years, some such plan of semi-centralisation appears to me to be the only solution of a remarkably difficult problem. Nothing certainly could be worse than the present system of making every individual analyst the judge of what ought and what ought not to be allowed. There are sometimes reasons, which cannot be known to the analyst, why certain admixtures should be made to food or drink, which can now only be brought forward at the expense of a law case, involving the reputation of honest firms, or the good name and repute of the analyst. Such cases would come first under the notice of the Chemical Board, and due allowance would be more likely to be made for trade requirements than is the case at present.

THE CHESHIRE COUNTY COUNCIL.

ANALYST'S REPORT.

Mr. J. Carter Bell says:—During the quarter, 159 samples were analysed, 50 butters, 39 milks, 7 coffee, 5 cheese, 27 spirits, 10 groceries, and 21 waters. Of these 9 samples were adulterated, viz., 4 butters, 4 milks, and 1 cheese. Some samples were poor in quality, while some contained accidental impurities, but I am careful to distinguish between the accidental and the wilful adulteration. The four milks were taken at the same time from the Cheshire workhouses. Two of them were adulterated with 10 per cent. of water, the other two samples were skim milk, and these were adulterated with 40 to 50 per cent. of water. I think all will agree in saying that this is a most cruel form of adulteration, for it is hardship enough to be in the workhouse without having to drink skim milk containing 50 per cent. of water. If the guardians cannot afford a few shillings for the purpose of ascertaining whether the milk supplied to the poor is pure, then I shall be most happy to act as analyst for the paupers free of charge. The butters were adulterated with water, containing in one case as much as 38 per cent. This is a greater amount than I ever met with before. In this case the butter broke up like a piece of crumbling Cheshire cheese, and the chief use of the butter fat was to hold the water and salt together, for the water and salt constituted 50 per cent. of this mixture; but what was still more surprising to me was, that after I had kept the butter for two weeks the water and salt were reduced to 32 per cent., the water having literally run out of the butter, carrying the salt with it. This adulteration must be a serious loss to grocers buying such butters, for not only are they liable to fines under the Adulteration Act, but they are also considerable losers by the loss of their profits, for in a case like the above they would lose more than 20 per cent. of the butter before it was all sold.

A sample of white sugar was brought to me which appeared to have an uncommonly blue shade. The person who bought the sugar was surprised to find on using it for the purpose of sweetening oranges a bright blue colour was developed. The sugar was found to be dyed with what is called Nicholson's blue, which is iris phenyl rosaniline sulphuric acid. This colouring matter produces a weak blue shade in the presence of alkaline substances, but on the addition of an acid, its rich blue tone is fully developed. The cheese which was adulterated was a private sample sent by a gentleman in Cheshire. This cheese at first sight was fair to look at and might have been taken for an ordinary Cheshire cheese, because it had a rich fatty appearance, but on analysis it was found that this unctuous look was due to water in excessive amount. The ordinary cheese has the following average composition:—

Water	..	..	..	..	36.24
Caséine	..	..	..	..	31.21
Fat	..	..	..	..	27.42
Ash	..	..	..	..	4.21

But this adulterated sample was composed of

Water	..	..	..	..	49.34
Caséine	..	..	..	..	32.12
Fat	..	..	..	..	13.21
Ash	..	..	..	..	4.81

On comparing the two it will be seen that the difference is very great, and becomes greater still through the fact found on analysis that the fat in the adulterated sample is nearly all foreign fat; that is to say, the sample is what is called a skim milk cheese, to which in the process of manufacture some animal fat other than butter has been added. Without exaggeration I can safely say that, after the cheese had been standing in a moderately warm place, such as an ordinary room for a few days, decomposition rapidly set in, the sample becoming so offensive that I would not give it to the beggar at my gates. This quick decay is, no doubt, due to the excessive amounts of water and curd; whereas in ordinary pure dry cheese fat and curd are in about equal percentages, but in this adulterated sample the curd is 64 to 26 of fat, and the result is, that instead of a slow ripening, we have a rapid rotting. The sale of these cheeses must inflict a grievous injury upon the British farmer, for, as I have before said, they are fair to look upon, and might deceive even the very elect; therefore, under these circumstances, they should certainly be branded with a distinct name, and I would suggest the name of casérine in letters of red across the top, bottom, and circumference of these cheese, and those letters should be painted in oxide of iron paint extending right across the top, bottom, and circumference, and it could be so arranged that when the cheese was cut up the pieces should be placed upon a stand bearing the name Casérine.

J. CARTER BELL,

County Analyst.

THE TENTH ANNUAL DINNER OF THE
SANITARY INSPECTORS' ASSOCIATION.

The Sanitary Inspectors dined at the Criterion, on Saturday, February 11th, the president, Dr. B. W. Richardson, M.A., L.L.D., F.R.S., in the chair. Mr. John Hutton, Dr. Shirley, F. Murphy, Mr. J. J. Colman, M.P., Major-General Webber, Professor D. E. Hughes, Rev. Canon Harford, Mr. H. B. Williams, Dr. F. J. Allan, Dr. J. King Warry, and a number of gentlemen interested in sanitary movements were present by invitation of the society. Dr. Richardson's address was a model of graceful, cultured oratory. Huxley, said Dr. Richardson, had spoken of hodmen of science. The sanitary inspectors were the hodmen of sanitation, making England sweeter, and a garden of purity. They must, however, be better paid, that was necessary for the public health; and the sanitary inspector must not be at the beck and call of a six months' tenure of office held from a local authority that hampers his efforts. The present system under which the sanitary inspector held his appointment, placed him at the mercy of bodies that wished to impede his work, and was against the public welfare. He felt a pride in succeeding Sir E. Chadwick, but would be prouder when from the association's own ranks the sanitary inspectors elected one of themselves as president. Till then he was their debtor.

Mr. John Hutton (chairman, London County Council) emphasized the need of larger powers and freer conditions for sanitary inspectors, and laid special stress on the inadequate remuneration for work so beneficial to the community. Mr. Hutton paid a graceful compliment to Dr. Harris, M.O.H., Islington and the sanitary inspectors of the district, for making the schoolmaster stand aside until the causes that dealt death to the scholars were removed. Such work said Mr. Hutton showed the public and the public mind grasped the fact that the integrity and care of the sanitary inspectors deserved generous recognition. The London County Council recognised the record of honesty and zeal by increasing the salaries and appointing more inspectors.

Mr. Williams (Hornsey), said every honest man welcomed the sanitary inspector, but still there existed people who would rather live in stinks, than pay a little money for pure air and healthy surroundings. In Hornsey, people who had had cesspools for all time, were found to protest against anything better.

Dr. Fletcher Little said the thankless duty of the sanitary inspector was not always properly supported by those employing him, and in his own case as a medical officer of health, he saw wise fools who would pay £5,000 to be cured when ill, but would only pay £50 per year to the officer whose duty it is to prevent them being ill.

Mr. J. J. Colman, M.P., strongly impressed upon the gathering the danger of seeking to withdraw from local authorities their present powers; but as the assembly quickly discovered that the hon. member knew more about 10 per cent. of wheaten flour in mustard than of the pressing needs of sanitary officers, his special pleading fell flat, and it was a pity the hon. member did not stay to hear Mr. Alexander's terse, sensible speech, as it would have been an education to him upon an important question, which legislators would do well to study before they venture to advise upon. Mr. Alexander showed the need for tenure of office and for the sanitary inspector being free from the power of insanitary vestry gangs and local authorities, who get on to boards and vestries for the sole purpose of burking the sanitary work. The pay of the sanitary inspector was lower in scores of cases than that of the labourer, and nearly every member of the association in the country complains that there is no chance of his doing his duty to the public by reason of the stultification by the authorities.

With the exception of Mr. Colman's speech, the addresses were able and to the point, and the gathering was a pronounced success. The contrast between a real Sanitary Association like this and a sham one like the Mansion House Council is an instructive one. To this Association the late Mr. Berridge bequeathed £3,500, whilst to the Mansion House Council on the dwellings of the poor he gave £5,000. For the latter association, the Lord Mayor of London is again, we see, soliciting subscriptions, and the public is asked to do what neither Lord Mayor nor an Executive comprising Archbishops, Chief Rabbis, Earls, Sirs, Right Honourables, M.P.'s, and some score of philanthropic deadheads have yet done. That is, the public are asked to subscribe money which the self-advertising Mansion House gang carefully refrain from subscribing. From reports now before us we see that the credit of the work of well-nigh every sanitary inspector and medical officer in the metropolis is coolly claimed by this sanitary humbug. Reports of cases of sanitary prosecutions are published as though the Mansion House Council or its inspectors had originated them, when they well know that they have had no more to do with such prosecutions than the man in the moon. We confess to a feeling of the most intense surprise that a council like this should have the impudence to ask one farthing from the public, or that philanthropists should bequeath it a shilling. We would like to have some evidence that it has done one sovereign's worth of solid sanitary work during the past year for its £6,000. At any rate, it might cease the shameless impudence of taking to itself, by inference, the credit of the work of every sanitary inspector in the metropolis. We cordially wish the real Sanitary Association, that of the Sanitary Inspectors, every success, and hope our readers who have not yet joined it will do so, and aid in unitedly working for a removal of the myriad of evils that now harass and frustrate the work of the earnest sanitary inspector.

THE SOMERSET HOUSE SCANDAL.

WHO IS THE HIGHLY PLACED OFFICIAL?

The *Westminster Gazette*, February 15th, says:—

WHAT IS GENUINE MILK FROM THE COW?

ANALYSTS AT LOGGERHEADS.

The Society of Public Analysts are not satisfied with the wording of certificates given by Dr. Bell, the principal of the Inland Revenue Laboratory of Somerset House, on disputed samples referred to him under the Sale of Food and Drugs Act. A letter signed by most of the members of the society was forwarded to Dr. Bell, pointing out that in the case of milk he sometimes states that he "is unable to affirm that water has been added," and suggesting that "in cases which appear to be doubtful and in which you consider it probable that water has been added," although your analytical results do not enable you to speak positively upon the point, it would be only fair and proper to add to your certificate that 'the results of the analysis are at the same time compatible with the presence of — per cent. of added water.'" A similar suggestion was thrown out to Dr. Bell as regards butter alleged to have been adulterated. The society averred that they had "long observed with regret your practice of certifying in a manner liable to be interpreted by the Court as definite on samples of milk which have been kept for a considerable time, and which, therefore, when examined by you must have been in such a condition as to preclude any trustworthy opinion being formed as to their original composition.

In his reply, Dr. Bell stated that "with reference to the suggestions that there should be added to our certificates some form of words to the effect that the results are compatible with some other conclusion than that expressed in the certificate, I am advised that there would be serious objections to our making any such addition to our certificates." Dr. Bell further remarked that whenever a sample is received in a condition which precludes a trustworthy opinion being formed respecting its original composition, his department declines to analyse it. This reply did not satisfy the Society, and the Council have forwarded Dr. Bell a final letter regretting "that you cannot see your way to adopt the suggestions made to you, and that you adhere to a course of procedure which is opposed to the general opinion of public analysts."

A representative of the *Westminster Gazette* who sought the views of a highly-placed authority on the merits of the dispute was informed by the gentleman in question that, in his opinion, gross injustice might be done to respectable tradesmen if the analysts at Somerset House were to issue certificates worded in the manner suggested by the Society of Public Analysts. It should be the duty of the officials at the Inland Revenue Laboratory simply to state the facts as they found them, and not to enter the regions of speculation.

"It has been proved over and over again by tests which are indisputable that the quality of milk yielded by different cows varies very considerably," said the authority referred to. "Feeding enters largely into the question, and the quality changes with the season of the year." The public analysts contend that milk should come up to a standard of 9 per cent. of non-fatty solids; but if this is rigidly applied all round, many samples of genuine milk will be declared to be watered. Analyses of milk taken direct from the cow in the presence of the analyst, have shown beyond all doubt, that in a large proportion of cases genuine milk does not come up to this 9 per cent. standard. The Somerset House people do not apply the standard referred to, but deal with each sample on its merits, usually taking a limit of about 8·5 or 8·6 per cent. If they found that the non-fatty solids just came up to 8·5 per cent., and there was no satisfactory proof that the milk had been watered, they would say that the results of the analysis did not show evidence of watering. By adding the words suggested by the Society of Public Analysts to the effect that the results were compatible with the presence of added water, a stigma might be attached to a tradesman against whom there was not the slightest evidence.

Some time ago, the milk yielded by a number of cows on a farm belonging to an English statesman of world-wide reputation was analysed by an experienced analyst. The result was that the non-fatty solids in the different samples ranged between 9·58 and 8·23. If, however, a prosecution had taken place and the 9 per cent. standard had been upheld, a Minister of the Crown might have been fined for selling watered milk, although it was all the time undoubtedly genuine.

We have no difficulty in recognizing the source of the above wonderful opinion and would suggest to our very green Contemporary that if it wants to give its readers information it had better consult scientists in place of highly-placed lazy officials.

MR. LABOUCHERE, the fearless exposé of so many scandals, speaks of the question in plain terms.

Truth, February 16th, says:—

Public analysts have a legitimate grievance against Dr. James Bell, Principal of the Inland Revenue Laboratory at Somerset House. The latter is in the habit of so wording the certificates issued by him on disputed samples referred to him under the "Sale of Food and Drugs Act," that there is a liability, the public analysts contend, of their producing an erroneous impression on magistrates and on the public. They have therefore asked Dr. Bell to add certain words to his certificates which shall make them as fair to the public analyst as to the trader. This not unreasonable request, however, has been refused, and on grounds against which, it appears to me, the Society of Public Analysts has good cause to protest.

DR. BELL AND THE PUBLIC ANALYSTS.

The *Nottingham Express*, of the 11th inst., commenting on the correspondence between Dr. Bell and the Society of Public Analysts, says:—

When a certificate states that a particular sample "falls within the limits of the poorest quality of genuine butter met with in commerce, but contains no evidence of foreign fat," we may be very certain that the butter in question is as near bad as it can be, and most people would prefer the very best margarine to the worst class of genuine butter. In such cases we do not see why Dr. Bell refuses to comply with the wishes of the public analysts, who desire the addition of the words "but the results are compatible with the presence of . . . per cent. of foreign fat in the sample." It is quite easy to see that some discredit may be unreasonably attached to a public analyst when a certificate comes down from London technically contradicting his analysis. There is no reason to doubt the impartiality of the public analysts. If they make mistakes it is, of course, only right that the Government certificate should correct them. But when it comes to deciding between very poor pure butter and respectable mixed butter, and certainty of conclusion is impossible, the formulæ of a certificate ought not to be allowed to bring discredit on an analyst. The public analyst protects the general consumer, the Government Department protects the tradesman. Both have their rights, but it is the consumer who requires the more constant protection.

LEICESTERSHIRE AGRICULTURAL SOCIETY.

VENDORS OF IMPURE FEEDING STUFFS.

At a meeting of the Council of the Leicestershire Agricultural Society, on the 2nd inst., the following communication was read from Dr. Dyer with reference to the proposal which had been made to publish the names of vendors of impure feeding stuffs and manures:—

"The question raised in your letter is a very difficult one. I have no knowledge of the vendors of the cakes, &c., sent to me, and could not make it my personal business to inquire into the question without subjecting myself to the possibility of libel actions. In the case of the Royal Agricultural Society, the secretary makes the necessary inquiries, I believe, in the name of the society—i.e., to say when the consulting chemist comes across a bad case, he reports to the secretary, who transmits to the member sending the sample a form to be filled up giving all particulars of the transaction. I believe I am right in saying that in a very large proportion of cases the senders of the samples decline to supply the information as to vendors' names, &c., and the vendors no doubt are often willing to pay compensation to prevent information being given. If your council will instruct you to make similar inquiries, I will tell you when I have cases to be inquired into. But if the council wishes me, as an officer of the society, to take the responsibility of the inquiries, and of the reporting, I should have to have provided for me an ample security against possible legal expenses. You may have observed that it is not the consulting chemist, but the Chemical Committee of the 'Royal' that issues the quarterly reports of adulterations, &c. Of course the Royal is a wealthy body, able to fight if necessary up to the House of Lords over a libel action—and this being so people shrink from fighting it. But a local and comparatively poor society like ours would suffer badly in an obstinately-fought libel case, even if it ultimately won. Suppose, however, that I have a cake sent to me called 'linseed cake' and find it to be impure. Inquiries would be made, and the farmer might state in reply that he bought it as 'pure.' The society would publish the vendors' name. Possibly there was only a verbal guarantee of purity which the vendor might deny, and he would at once bring action against the society for propagating a libel. It would be a perfectly open question how a judge and jury would view the case, and if the man got damages, these and the costs might snap up £1,000 in no time. Of course the society would take legal opinion in each case of adulteration before publishing, and so minimise the risk as much as possible, but the council would have to hold itself prepared for such emergencies as I have indicated. Often oil crushers of large means are behind the actual local vendors of impure oil cakes, and would not improbably help them in resisting the society's action. Of course, personally, I have no objections at all to the proposal, provided I am legally secured against personal consequences, but I have ventured to draw your attention to some of the points that arise in my mind on receipt of your letter.—Faithfully yours, "BERNARD DYER."

After discussion Mr. Toone moved that "Any member receiving an unsatisfactory analysis from Mr. Dyer shall bring it before the society, who shall send a form to the buyer of the goods to be filled up and returned, and the information obtained shall then be submitted to the Council, who shall take what course they think fit." This was seconded and agreed to.

On the motion of Mr. Sanders, seconded by Mr. Hincks, it was resolved that the fee for analysis of food stuffs and manures be 2s. 6d., the other 2s. 6d. to be paid by the society.

The resolution was then put and carried by five votes to four.

ADULTERATION PROSECUTIONS.

BUTTER AND MARGARINE.

At the Belfast Summons Court, before Messrs. James Henderson, J.P.; Thomas H. Browne, J.P.; and John Gregg, J.P., Robert Cleeland, 35, Little George's-street, was summoned by David M'Master, inspector of foods, for having, on the 9th January, sold butter not of the substance and quality demanded by the purchaser, contrary to the statute. The substance on being analysed by Professor Hodges was found to contain 80 per cent. of margarine. Mr. Lewis prosecuted, and Mr. Harper defended. Mr. Harper pleaded guilty on behalf of his client, but stated that a woman named Ellen Hawes (who was also summoned) had been left in charge of the shop, and had mistaken the margarine for the butter, there being no labels attached to them. The defendant was fined in 40s. and costs.

At Ilkeston, on the 9th inst., Percy Robert Wyatt, of Sandiacre, was summoned by Captain Sandys for exposing for sale a quantity of margarine which was without a label, as required by the Act. Mr. Searby (Messrs. Hopkins and Searby) appeared for defendant. Captain Sandys proved the offence, and said he found a quantity of margarine unmarked. Mr. Searby admitted that an offence had been committed, but it was one of pure inadvertence. A label had been placed on the margarine the same morning, and had only been temporarily removed to supply a customer. Defendant gave evidence, and explained how the label came to be off the margarine. The label was on the margarine about five minutes before the prosecutor came in. Fined 20s., and 11s. 6d. costs.

Abraham Barker, of Sandiacre, was summoned on the 9th inst., at Ilkeston, by Captain Sandys, for selling to him, on the 22nd January, a certain article called butter, which was not of the quality demanded. Defendant, who was ill, was represented by his son. Captain Sandys said he purchased what was represented to be butter, but on being submitted to the public analyst it was found to be utterly devoid of butter. Prosecutor told him that he did not think much of the butter himself. Defendant's wife said she purchased the butter for fresh butter, and sold it just as she bought it. The Bench said defendant could recover from the person who sold it to him. Fined 30s., and 11s. 6d. costs.

At Liverpool, on the 8th inst., John Bradford, 50, Blessington-road, was fined 40s. and costs for having on a side shelf in his shop a piece of margarine without a label.

At the Liverpool County Magistrates Court on the 8th inst., Joseph Boyce, provision dealer, of Garston, was summoned for selling margarine for butter. A police-constable disguised as a working man, went to defendant's shop, and he stated that upon asking for half-a-pound of butter, was supplied with half-a-pound of margarine for which he paid 3d. He would have paid more if he had been asked. Mr. Rudd defended, and complained that the action of the police was improper. The shop-assistant who served the constable said the officer asked for "half-a-pound of 3d. butter," and as people frequently asked for margarine that way, he served him with margarine from a lump on the counter which was labelled as such. He also wrapped the article in a stamped paper as required by the Act. The Bench inflicted a fine of 20s. and costs.

George Cowan, provision dealer, Lodge-lane, for selling a pound of ls. margarine for butter to a police-officer, was fined 10s. and costs.

William Lecker, of Long Eaton, was summoned at Derby, on the 10th inst., for having exposed margarine for sale without it being properly labelled. The offence was proved by Captain Sandys, inspector under the Food and Drugs Act. He purchased a pound of the article for 8d., and had a sample of it analysed. The analyst reported that it consisted entirely of margarine, and was devoid of butter. There was no deception on the defendant's part, except that it was not labelled according to the Act. The defendant's wife stated that a boy was left in the shop, and did not carry out his instructions.

MILK.

At Tredegar, on the 7th inst., Mrs. James was charged, at the instance of the County Council, with selling adulterated milk at Ebbw Vale on the 20th of December last. Mr. E. Stafford Gustard appeared to prosecute, and Mr. T. G. Powell defended. Mr. T. E. Sergeant, inspector under the Council, proved the purchase of the milk from defendant's servant. Mrs. James, in defence, said that she had been carrying on business in the milk line for over thirty years, and without having complaints. The girl came home that morning in a frightened condition and said what had transpired, and admitted that she had of her own accord put in a small quantity of water into the milk. The Bench agreed the case was a hard one on Mrs. James, but that they must go in accordance with the law, and, in consideration of the circumstances, imposed a fine of 40s. only, including costs.

Milk was also purchased from Mrs. Amos at Ebbw Vale on the 2nd of January, from a person at Sirhowy on the 21st of December last in the employ of John Price, and from Ann Evans at Sirhowy on the same date, who were each fined £5.

George Kelsey, milk carrier, was summoned at the Croydon Borough Police-court, on the 8th inst., for "wilfully and maliciously committing damage to the amount of 4d. to and upon certain milk," the property of the Amalgamated Dairies Company, of 27, High-

street, South Norwood. Reduced to plain language, it was a case of adulteration. For the defence, Mr. Dennis submitted that no case had been made out, and, by way of simile, asked the Bench whether the addition of water could be said to damage whisky? (Laughter). The Mayor said the case had given the Bench some little difficulty, but they were of opinion that the defendant did wilfully and maliciously damage the milk. He would be fined 2s. 6d., 4d., the amount of damage, and 5s. 6d. costs.

At Stratford (Essex) Borough Police-court, on the 10th inst., William Edward Phillips, of 11, Idminton-road, Stratford, was summoned on the information of Dr. Saunders, medical officer for West Ham, for selling milk that was deficient in fat, and from which at least one-third of its original cream had been abstracted by skimming or otherwise. Mr. Atkinson defended. On January 12th, Allan Bagshaw, one of the assistant inspectors of nuisances, bought a pint of milk from Ada Irons, and paid 2d. for it. He passed it to Mr. Crocker, chief inspector, who got it analysed, and the certificate showed that one-third of the cream had been abstracted. Before this case was decided, a similar summons was heard against Edwin Murch, of 352, Romford-road, in which Mr. Ricketts defended. Mr. Baggallay decided that no offence had been made out under the section on which the informations were drawn, and dismissed both cases.

Herbert Dean, of 12, Cruikshank-road, Stratford, pleaded guilty to selling milk adulterated to the extent of 22 per cent. of added water, and was fined £3 and costs.

At the West London Police-court, on the 9th inst., George Jones, of Milson-road, Hammersmith, was fined 60s., with 12s. 6d. costs, for selling milk adulterated to the extent of 15 per cent. of added water.

At Lambeth Police-court, on the 9th inst., Henry Hanson, wholesale milk-dealer, of New-yard, Great Queen-street, was summoned by Inspector Dewey for supplying milk to the Camberwell Infirmary which, upon analysis was shown to be adulterated with 10 per cent. of water. Mr. G. W. Marsden appeared on behalf of the Vestry, and Mr. Ricketts on behalf of the defendant. Inspector Dewey gave evidence to the effect that he, accompanied by Inspector Groom, at five o'clock in the morning took a sample of milk at the Camberwell Infirmary which was in course of delivery there. The magistrate said that he considered the case had been proved, and fined the defendant £2 and 12s. 6d. costs.

At Fakenham, on the 3rd inst., Washington Hamond, of Penshorpe, farmer, was summoned by Superintendent Thomas Murrell, of Little Walsingham, with selling milk which had not less than 15 per cent. of its natural fat removed, and was not of the nature, substance, and quality demanded by him. Superintendent Murrell stated on the evening of the 12th December he saw the defendant's man hawking milk in Fakenham. He asked for a pint and a half of new milk, which he put into a bottle. He afterwards divided into three parts, and, having sealed, gave one part to defendant's man, another he sent to Mr. Sutton, the public analyst, and the other he retained himself. He afterwards received the analyst's report, as follows:—Fat 2.54 per cent., non fatty solids 8.69 per cent., water 88.77 per cent.—and upon which he laid the information. Defendant stated it would have been far fairer if Mr. Murrell had asked for the milk as soon as it left his premises, as his man, being occasionally away from his cart, left plenty of time for anyone if they felt so disposed to tamper with the milk, although he did not wish to say that was the case. He had no idea the milk was below the standard required by the Act, and that there was any Act in existence until now. He had served over 200 customers for the past twenty years, and always heard his milk praised for its goodness. The sample taken happened when the cows were being fed upon the tops of mangolds, hence the poorness of the milk. If it had been taken at any other time the analysis would have been different. He would pledge his word no water was ever added to his milk. The Bench fined defendant £5 and £1 15s. 6d. costs.

SOMERSET HOUSE AGAIN.

At Woolwich, on the 10th inst., William Francis, dairyman, 84, Albert-road, North Woolwich, was summoned for selling milk adulterated with 15 per cent. of added water, and with 20 per cent. of the fat abstracted. Mr. Hughes, M.P., prosecuted for the Woolwich Local Board of Health. At the first hearing the defendant declared the milk was pure, and paid the necessary fee to have it analysed by the Somerset House chemist. Mr. Marsham said that the certificate from Somerset House stated that the milk contained "not less than 5 per cent. of added water," and made no mention of any of the cream having been abstracted. He inflicted a fine of 10s. and 2s. costs.

John Johnson, dairyman, 188, Powis-street, Woolwich, was summoned by the same board for selling milk adulterated with 20 per cent. of added water. At the first hearing the defendant paid the fee for the milk to be sent to Somerset House, stating that he milked it himself, and was confident it was genuine. Mr. Marsham read the Somerset House certificate, which stated that the milk contained no added water. He dismissed the summons, and ordered the Local Board (represented by Mr. Hughes) to pay the defendant 41s. costs. Mr. Greenep, who appeared for the defendant, said that it was a monstrous thing for a public analyst to make such a return. There was a second summons for 13 per cent. of added water, but the board withdrew it.

SPIRITS.

At Knaresborough, on the 1st inst., James Trees, of the Spacey Houses Inn, was charged by Henry Gamble, excise officer, with sell-

ing adulterated gin and whisky on the 22nd of December, 1892. Mr. R. S. Byron appeared for the defendant and pleaded not guilty. The prosecutor stated that on Thursday, the 22nd of December, he called at the Spacey Houses Inn and purchased half a pint of gin for the purpose of having it analysed by the county analyst. Mr. Byron: Are you prepared to hand in the certificate of the official analyst? No. Mr. Byron: I object then to the prosecution. Mr. Gamble said that he purchased the liquor and sent it by registered letter to the analyst. When he purchased the liquor he divided it; one half was sent to the analyst and the other was left with Mr. Trees. The Chairman: Did you tell them for what purpose you purchased it? Yes. Who did you tell? The attendant, afterwards Mr. Trees himself. Cross-examined by Mr. Byron: What time did you go to the house? About mid-day. Who did you see when you went in? I forget his name, I believe it was Wm. Bentley. Was he the person who supplied you? Yes. How long were you in the house? About 10 minutes to a quarter of an hour. Do you remember where the whisky and gin were drawn from? Two kegs on the shelf. Which room? The room at the back. Did you see Mrs. Trees? Not to my knowledge. Who was there? Bentley. Did you ask for Mr. Trees? Yes. What was the answer given to you? He was not at home? Will you swear that? Yes. Did you ask for Mrs. Trees? No. What did Mr. Trees say to you after you mentioned the matter to him? He did not recollect. You know that Mr. Trees has not been well for months? Yes. Mr. Byron, pleaded guilty, but maintained defendant, Mr. Trees, was ill at the time, and Mrs. Trees was away from home. An inexperienced person was left in charge, and hence it was that the spirits in question were adulterated. The Bench, without hearing the evidence for the defence, inflicted a fine of 10s. in each case (for the adulteration of gin and whisky), 18s. 4d. costs in one case, and 17s. 10d. in the other.

GIN.

On the 10th inst., at the Wigan County Police-court, Richard Brown, landlord of the Belle Vue Inn, Belle Green-lane, was summoned for selling adulterated gin. Sergeant Scott called at defendant's house and purchased a quantity of gin. A sample was submitted to Dr. Campbell Brown, who certified that it was a mixture of gin and water, 41½ per cent. under proof. Defendant, who admitted the offence, was fined 20s. and costs.

PUBLIC ANALYST'S AND THE ADULTERATION ACTS.

IMPORTANT MEETING AT BURLINGTON HOUSE.

An important meeting was held in the rooms of the Chemical Society, Burlington-house, on Wednesday, Mr. M. A. Adams (public analyst of Kent) presided, and there was a numerous attendance. The Chairman, in opening the proceedings, said the resolutions dealt with matters which were of more interest to the general public and traders under the Food and Drugs Act than to public analysts in their professional capacity. The council felt that the subject was one of great importance, and they had invited a number of representative men, whose interests were more directly involved, to attend that meeting and take part in their debate.

Dr. Adams moved the following resolutions:—

(i.) That amendment of the laws relating to adulteration is urgently required.

(ii.) That the present Acts often operate unfairly on the retail traders, and that provision is necessary to ensure in many cases of adulteration the prosecution of the real offenders.

Mr. Fairley, in seconding, advocated making the adulteration of food an offence, as well as the selling of adulterated food. Heavier penalties ought also to be inflicted, as at present one day's fraud was often sufficient to cover the maximum penalty. The present Acts were in his opinion, capable of improvement in every point. He also urged the need for greater security as to the identity of samples.

The Hon. H. de Tatton-Egerton, M.P., stated that he knew of one case in which a manufacturer, in the production of a single article, made by adulteration a profit of £1,200 per year. Even in the most strict districts such a person would find adulteration pay him well for he could afford to be fined even £20 weekly, and still be a substantial gainer by fraud.

Dr. Cameron, M.P., expressed his hearty concurrence in the demands of the public analysts, and said retail dealers sold food and drugs with an implied warranty, and he thought that the wholesale dealer should be obliged to do the same, except when a written notice, stating that the article sold was a mixture was given. In his remarks Mr. Cameron made the gratifying announcement—that he thought it feasible to get a bill through the House of Commons on the understanding that the measure would go before a Select Committee, but that such a measure stood no prospect of passing until next session.

Mr. Kearley, M.P., in supporting the resolutions gave some striking instances of the extent to which fraud is carried. In Wands-worth and Gravesend margarine was sold by a dealer as butter, and although complaints were made and samples taken, the samples were invariably found to be genuine when purchased by the inspectors, although privately purchased samples from the same retailers showed 80 per cent. margarine. Speaking of foreign adulteration, Mr. Kearley pointed out the impossibility of hounding the foreign adulterator to his den, and suggested the advisability of an analysis at the port of entry, as is done with tea. He invited the public analysts to assist the M.P.'s in drafting an Act.

The resolutions were carried unanimously.

Mr. Pattinson (Newcastle) then moved the following resolution:—

(iii.) That in view of the fact that, as is shown in the Local Government Board reports, the Food Acts are practically dead letters in a large area of the United Kingdom, it is necessary that adequate provision be made for securing uniformity in their application and in their due enforcement.

Mr. Otto Hehner, in supporting the resolution, showed that by the present Local Government Board recommendations as to one sample per 1,000 persons, the retailer was only visited once every five years, and that in the three articles of spirits, butter, and milk, the purchasers were defrauded of £2,000,000 annually.

Mr. W. Thomson, Stockport, urged the need of standardising, a subject on which there was considerable discussion. The resolution was then put and carried unanimously.

Dr. George Turner proposed the fourth resolution.

(iv.) That in order that the Local Government Board should have better control over the working of the Acts, a portion of the expenses of working them should be borne by the Imperial Revenue.

In the discussion it was pointed out that the Acts were frustrated as in the case of Southport by corrupt local authorities—themselves shopkeepers—who would neither enforce the Acts nor allow any samples to be taken. It was suggested that the Acts should be made compulsory, the inspectors be movable in the manner excise officials now are, and the Local Government Board defray the entire expenses of enforcing the Acts and receive the fines, analyses to be made by district analysts as at present. An amendment to this effect found no seconder, and the resolution was passed as drafted.

Mr. A. H. Allen (Sheffield), proposed resolution 5, Mr. C. E. Cassal resolution 6, Dr. Alfred Ashby resolution 7, and Mr. Hehner resolution 8 as follows:—

(v.) That in view of this it is desirable that there should be a duly constituted chemical department of the Local Government Board with whom the public analysts, as officers of the Local Government Board, should be placed in direct relation.

(vi.) That the present system of reference in the case of disputed analyses is unsatisfactory and ought to be entirely remodelled.

(vii.) That the compulsory combinations of the two offices of medical officer and public analyst is in the public interest undesirable.

(viii.) That provision should be made to ensure better than heretofore the proper qualification of officers under the Act.

All these were carried unanimously.

Speaking upon resolution 5, Mr. Allen urged the importance of the suggested department, the chemical officers of which would be in touch with the chemical advisers of foreign governments, and thus become sooner acquainted with new forms of fraud, and be able to put public analysts on their guard against such adulterations. Mr. Allen pointed out that it was not to be expected that Somerset House chemists, analysing only some 40 samples per year, could be conversant with the scientific adulteration of to-day, and, however well intentioned they might be, they could not know food analysis. At present, owing to the Somerset House attitude, the incompetent dairymaid was the authority to which the public analysts had to bow. She left excess water in butter, and Somerset House found it there and adopted her incompetence as a standard. In Sheffield alone £5,000 yearly was paid by the public for water supplied instead of milk.

Mr. Cassal (St. George's, Hanover-square) in moving resolution 6, said the present system was all wrong. The Somerset House chemical department was formed to test the alcohol in spirits and the moisture in tobacco, and their labours were for years confined to those researches. When public analysts discovered new methods, Somerset House then laboured to master those methods. The *Pharmaceutical Journal* alleged that ill-feeling existed between the analysts and Somerset House. That allegation was unwarranted. Everyone personally entertained the greatest respect for Dr. Bell and his colleagues, but they had long considered, and did now consider, that the Somerset House certificates were egregiously wrong, and no scientific man doubted that Somerset House certificates were wrong. The meeting that night offered the department a very necessary golden bridge by which they might resign all connection with the Adulteration Acts.

Dr. Ashby, Reading, moved, and Dr. Angell seconded, resolution 7: "That combined appointments of Medical Officer of Health and Public Analysts are, in the public interests, undesirable." From their experience as medical officers and analysts, both gentlemen were bound to say that the training was so different and the duties so exacting that one or the other must suffer.

Mr. Hehner, in moving resolution 8, said that an Adulteration Act should embody a clause that public analysts should be qualified, as medical officers of health are, and that no appointments should be made, as has often been the case, of persons to the position of public analyst who were not experts in food analysis.

WARRANTY OF MILK.

At the Sheffield City Police Court on the 14th of February, before the Stipendiary Magistrate, William Longland, of 34, Myrtle-road, Heeley, Sheffield, milk deliverer, was charged under the Sale of Food and Drugs Act, 1875, with selling to John Gibson, an Inspector of Nuisances, a sample of Milk, which was certified by the City Analyst to have been deprived of a portion of its natural cream or butter fat, which he esti-

mated at fully one-third. Mr. H. Sayer, Deputy Town Clerk, appeared in support of the information, and Mr. A. Muir Wilson defended. Mr. Sayer, in opening the case, stated that it was one of considerable interest to milk-sellers and farmers, because the understood the defence was that a warranty, by means of a label, had been given with regard to the milk under Section 25. The facts of the case were not in dispute, Inspector Gibson on the 23rd of January was in Myrtle-road, Heeley, when he saw the defendant in charge of a hand cart or "dandy" belonging to the Manor Park Milk Company. He purchased from him a pint and a half of new milk, duly observing the requirements of the Act, and submitted one portion of the sample to the City Analyst, who reported upon it as above mentioned. Mr. Sayer pointed out that even assuming the warranty to be a good one, it would be necessary to prove strictly the identity of the sample of milk, which had been purchased with the milk which had been conveyed in the churn bearing the label, and also to show that such milk had been sold in the same state as it was when it was received from the consignor. Mr. Wilson for the defence, said, he should rely upon the 25th Section of the Act, inasmuch as his clients, who he might say were the Manor Park Milk Company, had a warranty from the farmer from whom they purchased it, a Mr. Spendlove, at an address in Derbyshire, which he submitted, fully exonerated the Company. The label which he produced, and which had been affixed to the churn in which the milk had been brought to Sheffield, stated that the milk was "warranted pure new milk with all its cream on," and he hoped to be able to prove, as required by the Act, that the milk had been sold in the same state as when it had been purchased. He called the Defendant Longland, who stated that he had taken out 8 gallons of milk on the morning in question, which had been supplied to him by Mr. Wiggitt, the Sheffield Manager of the Company, and that he saw Mr. Wiggitt take the milk from a churn. There was, he said, in c.o.s.-examination, a large number of churns in the yard that morning, which had been received from Spendlove, and he could not say whether or not all had labels on. The thought that the one from which the milk was taken had a label on, but was not sure. Mr. Sayer then submitted that there was not sufficient evidence of the identity of the sample of milk sold to the Inspector with the bulk which had been contained in the churn, from which the label produced had been taken, and on the magistrate expressing himself dissatisfied with the evidence, Mr. Wilson undertook, if the case were adjourned, to the following day, to produce other and more satisfactory evidence.

On the 15th instant, Mr. Wilson informed the Stipendiary Magistrate that he had seen the Sheffield Manager of the Company. Mr. Wiggitt who declared that there was a very large number of churns of milk received from Spendlove on the morning in question, but he could not positively swear that the quantity of Milk furnished to Longland was all taken from the churn bearing the label which had been produced, and he added that if he did swear that, he did think he should not be believed. Mr. Wilson therefore said that he could not carry the case any further, he must submit to a penalty. The Stipendiary then said he must fine the defendant 40s. and 7s. costs, observing that he regretted that the safeguards which had been provided by the Act had not been more carefully followed.

REPORTS AND ANALYSES.

We have received samples of the preparations of Messrs. J. and A. Carpenter, 1, Sutherland-place, Watworth, London, S.E., whose "Sutherland Brand" goods have a large and increasing sale throughout the United Kingdom.

The soups and meats are of excellent quality and flavour, and the "Sutherland Brand" ox tongue as much superior to the imported ox tongues as English products when made with skill and care invariably are. All Messrs. Carpenter's "Sutherland Brand" goods are of English manufacture, and, as we had occasion to point out some months ago in reference to poisoning cases by tinned meats, there has not come to us one instance out of the many fatalities by eating tinned meats in which English tinned meats were found to be the cause of the disease or death. The selection of a better quality of meat, with greater care in cooking and in canning are very evident in Messrs. Carpenters' preparations. Their Sutherland brand ox tongue, in addition to being delicious in quality and flavour, is *ox tongue*, which is more than can be said of some of the imported article, as was seen in late researches by an American food expert into the use to which slaughtered horses were put. He could trace the hide, hoofs, and, in fact, all parts of the animals save one. The tongue for a long time eluded him, but he at last discovered its destination in an ox-tongue can, where its fattened-out tip at once showed to his expert eyes the horse origin, which would not have been obvious to the ordinary consumer. In point, therefore, of health, genuineness, and excellence of quality, first-class preparations like those of Messrs. Carpenter are to be commended in preference to the tons of trash of foreign origin that fill our markets, and that periodically poison their consumers.

WEDNESDAY'S PRODUCE MARKETS.

CORN.—The attendance at Mark Lane was small and trade slow. Wheat firmly held, and only a small business done. Barley very quiet, at about Monday's rates. Maize dull, and prices again easier in many cases. Oats firm, and 3d. more money asked, but sales very small. Flour had a slow demand, at former prices. Beans and peas quiet.

LONDON CENTRAL MEAT.—Beef supplies include a fair amount of Scotch, English, Liverpool, and Deptford killed American, and 1,550 refrigerated quarters, 450 being fores. Trade slow, but prices steady. Mutton supplies fair, and prices rather in favour of buyers. Veal firm for best qualities, and pork rather easier. Beef: Scotch sides, 3s 8d to 4s; shorts, 4s to 4s 4d; American, Deptford killed, 3s to 3s 4d; Liverpool killed, 3s 2d to 3s 4d; refrigerated hind-quarters, best, 3s 2d to 3s 8d; average, 3s 5d; seconds, 3s to 3s 6d; average 3s 3d; fores, best, 2s 4d to 2s 6d; average 2s 5d; seconds 2s 2d to 2s 6d; average 2s 4d; thirds 2s 2d to 2s 4d; average 2s 3d. Mutton: Scotch, 4s to 4s 4d; English, 3s 10d to 4s 1d; ewe, 3s to 3s 2d; New Zealand, 2s 9d to 3s; Sydney, 2s to 2s 2d. Veal, 4s 8d to 5s 4d. Pork, 4s to 5s per 8lb.

SPICES.—The public sales passed off with a rather quiet tone. 212 bales Zanzibar cloves partly sold at 4 5-8d; some bought in at 4 1/2d to 4 3/4d. 60 cases Penang unpickled sold 6 3-8d to 6 1/2d; a few lots of very good 11d. 76 packages Java taken in at 7d. 1,229 bags Pimento, about a third sold, 2 7-8d to 3d. 55 packages mace partly sold, West Indian, 1s 6d to 2s. 134 packages nutmegs mostly sold; Singapore, 90's at 2s, 109's at 1s 9d; Penang, 84's at 2s 2d, 93's at 1s 11d, 102's at 1s 8d; West Indian, 71's at 2s 2d, 73's and 78's at 2s to 2s 1d, 88's at 1s 8d, 90's and 98's at 1s 7d to 1s 8d, smaller at 1s 2d to 1s 5d per lb. 990 bags black partly sold, Singapore 3 1/2d to 3 3-8d. Alleppey chiefly bought in; 256 bags white partly sold, Singapore, 5 5-8d; 75 bags long taken in. 25 bales capsicums bought in, 30s. 370 packages Cochin gin ger mostly sold, 63s to 80s; 108 bags Jamaica small part sold, 70s to 78s; mouldy, 62s. 10 bags African sold 55s.

TAPIOCA.—At auction, 1,716 bags flake, a small part sold, chiefly at 1 3-8d. 693 bags flour taken in. 1,483 bags pearl, part sold, medium, 13s 3d; seed, 11s to 11s 6d; some bought in 12s 6d.

SAGO.—At sale, 624 bags, mostly bought in; medium grain, 12s to 12s 6d. 414 bags flour taken out.

ARROWROOT.—In public sale, 1,181 barrels, 100 tins St. Vincent, mostly sold 4 1/2d to 4 3/4d. 30 barrels Antigua bought in 3 1/2d.

SHELLAC.—Business done in TN orange. February 98s 6d; April, 99s; May, 100s. Later March sold at 100s, and April at 100s.

CHESHIRE CHEESE.—There was a pitch of several tons. The market was not so brisk as was expected. White cheese prevailed in quantity, and prices for both white and coloured were about the same. Quotations: Common, 50s to 60s; medium, 61s to 69s; and good Cheshire, 69s to 75s per cwt.

SUGAR.—The general tone of the market very quiet, and transactions limited. Cane sorts slow. Refined goods in moderate demand. Pieces about steady in value. Crystals occasionally rather cheaper. Stoved goods unchanged. Foreign refined quiet. French crystals, No. 3, 17s c.f. and i. Tates cubes, firsts, sell at 21s; seconds, 20s; crushed, firsts, 18s. 6d; seconds, —: Liverpool crystals, firsts, 19s 3d; small, 19s; seconds, 18s 9d; granulated, 18s 3d. Martine au's cubes, firsts, 20s 6d; seconds, 18s 9d; titlers, 19s 3d; pulverised, 19s; chips, 18s 6d; granulated, 18s 3d per cwt. Beet steady but quiet. February, 14s. 3d plus 1/2 per cent. sellers; March, 14s 3d plus 1/2 per cent. Closing firm and rather dearer on reports of reduction in the German stock here. Sales moderate.

TEA.—London Produce Clearing House quotations of good common China congou:—February, 6 8-16d; March, 6 8-16d; April, 6 7-16d; May, 6 7-16d; June, 6 6-16d; July, 6d; August, 5 12-16d; September, 5 8-16d; October, 5 6-16d; November, 5 4-16d; December, 5 4-16d; January, 5 4-16d per lb. Sales registered. nil. Fair whole-leaf Indian; February, 8 2-16d; March, 8 4-16d; April, 8 5-16d; May, 8 5-16d; June, 8 1-16d; July, 8 1-16d; August, 7 15-16d; September, 7 13-16d; October, 7 8-16d; November, 7d; December, 7d; January, 7d per lb.

COFFEE.—A fair tone prevails, and few qualities realise high prices. 15 casks 4 tier ces, 3 barrels, plantation Ceylon sold, 116s 6d to 121s 6d; peas, 132s to 133s. 488 bags East India sold 105s 6d to 115s; 140 bags Costa Rica sold 104s 6d to 111s 6d. 500 bags Guatemala sold 105s 6d. 177 bags Columbian taken out. 57 bags new Granada, part sold 107s 6d. 67 bags Maracaibo partly found buyers 91s. 100 bags Kera Raz, small part sold 102s to 107s. 11 bags Jamaica sold 104s 6d to 109s 6d; peas, 110s; 76 half bales Mocha taken out on quay terms. 34 bags washed Rio bought in. Futures opened steady, but quiet. Closing without material change.

NOTICE.

THE Editors beg to thank the many Public Analysts, Medical Officers of Health, Sanitary Inspectors, and Inspectors under the Food and Drugs' Acts, who have sent reports, notes of cases, and written approving of the objects of FOOD, DRUGS AND DRINK, and will be glad if Public Analysts and Medical Officers of Health generally will oblige by sending regularly their reports, and such cases of importance as occur in their districts.

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Food, Drugs and Drink, —THE— PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, FEBRUARY 25, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

SOPHISTICATED RHETORIC.

It has been our lot from time to time during the past six months to point the immoral tone of the self-constituted organs of the grocery trade in the discussion of prosecutions for fraud in food stuffs, and to show that the arguments of the conductors

of these journals have not been the arguments of supporters of honest traders, but the conscience-stricken complainings of the defenders of petty fraud by the peddling huckster and of wholesale science-aided adulteration by unscrupulous manufacturers. The great mass of the grocery trade, we are glad to find, do not recognise or endorse the opinion of the hireling scribes who pen articles full of simulated indignation every time a prosecution of an unusually important character takes place; and we are equally glad to find that none are more ready to welcome inquiry than the more respectable members of the trade, and none who like to see the fraudulent manufacturer punished more.

Nothing flimsier or more fatuous is published than articles which fill the leading columns of the papers which are founded for the purpose of capturing the grocery trade; but grocers, while they may buy the papers for the trade news they contain, are not deceived by the aimless and pointless vapourings of the ignorant writers in them. Two remarkable examples of journalistic fatuity are before us. One is from the *Grocer*, of the 4th inst., in which a writer disingenuously protests against the prosecution of a Ystrad grocer for selling skimmed condensed milk. Instead of defending the grocer as the dupe of the manufacturer of the incriminated stuff, this adulterators' journal suggests that there may be, after all, a doubt whether milk deprived of its nourishing properties is lacking in nutritive attributes. Then this shameful print puts forward the following incitement to the concealment of fraud by the grocer:—

"Retailers, indeed, at the present time cannot exercise too much caution in carrying on their business, since the wily inspector is ever on the alert to trick them if he can."

Who, we should like to know, among respectable grocers, will thank the writer of this specious article for suggesting that they are to adopt towards government inspectors the attitude of the receiver of stolen goods or the sneak-thief? What class of trader is it that requires to be taught that he must regard the guardian of the pure food supply, as his enemy and a person to be watched and provided against as a pickpocket watches a policeman? We do not need to defend food inspectors from the hateful innuendo of this mercenary advocate of concealed fraud; their character as a body stands too high. But we do feel it necessary to utter a protest against the circulation of such a hideous reflection on the honesty and integrity of the grocers of the United Kingdom.

Another journal, the *Grocer's Review*, published in its issue of the 7th inst. a diatribe against the newspaper press in general, because of the publicity given to cases of poisoning from eating canned goods. Like its older contemporary, this journal overreaches itself in the attempt to justify a wholly indefensible state of things. An attempt to show that the number of deaths resulting from the eating of impure canned foods is only normal, is ludicrous in its feebleness. We are solemnly told that "two millions of persons daily eat canned food of one sort or another in the United Kingdom. What," it is asked, "in comparison with this huge figure, are the few cases of reported death, most of which are found on investigation to be groundless?" This foolish drivel is supplemented by the remark that "It is very doubtful whether more deaths are not accounted for by chunks of butcher's meat getting wedged in people's throats." Presumably, there are some intelligent persons among the readers of the *Grocer's Review*. If there are, what must they think of a writer who draws a comparison between the victims of careless canning and the deaths from "chunks of butcher's meat getting wedged in people's throats!" The scribe of the *Review* never heard of the secretion of alkaloid poisons in canned meat, not he. If he were told of it, he would doubtless reply that such was of no rarer occurrence than the number of cases of persons

swallowing their false teeth accidentally. Such an argument would be quite as lucid and intelligent as that about the chunks of butcher's meat. It is lamentable that there are to be found writers capable of making such exhibitions in print, and as remarkable that intelligent traders should be insulted by such idle twaddle being served up to them.

EXPERIENCES OF A PUBLIC ANALYST.

MR. ALLEN ON PALTRY FINES.

At a meeting of the members of the Sheffield Literary and Philosophical Society, held at the rooms on the 7th inst., Mr. A. H. Allen, F.I.C., F.C.S., read an interesting paper entitled, "Twenty years' experience as a public analyst." Mr. S. Snell, president, occupied the chair, and there was a good attendance.

Mr. Allen first alluded to various acts which had been passed dealing with adulteration, and mentioned that adulteration of bread was formerly punished by whipping and exposure in the stocks. The use of that "adulterous drug" hops, in the manufacture of beer, was at that time penal. Public tasters were appointed to see that the quality of malt liquors was unexceptionable. In the reigns of Georges I. and II. Acts were passed dealing with adulteration of tea. The first general Act dealing with adulteration was passed in 1860. It was merely a permissive Act, and did not provide for the appointment of a public inspector to purchase articles for analysis. The Act was amended in 1872, but there was a great difficulty in its enforcement. An analysis was then based on the examination of one or of very few samples of each kind of food, and the extensive variations in the natural composition of food and drugs were wholly unknown. No books existed in which trustworthy information was to be found, and the methods of analysis adopted were easily performed. No society or association existed for the exchange of information and discussion of new processes, and that general intercourse which was so important between colleagues. The whole subject of adulteration was considered by a Parliamentary Committee in 1874, and their report resulted in the passing of the Sale of Food and Drugs Act, 1875. This Act from first to last avoided the term "adulteration," which had been extremely difficult of definition. The Act was amended in 1879, when a minimum strength was fixed for spirits, and it was rendered possible to take samples of milk in transit, and not simply in a milk shop. A useful supplement to the foregoing Acts was passed in 1887, and it provided that the name "margarine"—adopted on the suggestion of Mr. Allen—should be made applicable to all butter-like compounds not consisting wholly of butter. The existing Act might be with very great advantage amended in many ways, particularly in the fines, which are wholly insufficient where adulteration was distinctly proved. The chance of detection was so little and the penalties so small that it paid adulterators handsomely to take their chance of detection. In Sheffield a milkman's turn to be visited by an inspector only came once in two or three years, and if he sold 20 gallons a day, and adulterated the milk to the extent of 10 per cent. he would have made £113 before his turn came to be visited. Then very likely he would get off with a fine of 5s., accompanied by an expression of regret from the bench that they were obliged to inflict a penalty. Looked at in another way, he said the population of Sheffield was 320,000, and if each person consumed a quarter of a pint of milk daily, the cost slightly exceeding one-halfpenny, the annual value of the milk would be £243,333. In 1892, 38 samples of milk were actually adulterated, or were of suspiciously poor quality. Assuming that those 38 samples were debased to the extent of 5 per cent. all round, the loss to the town was nearly £5,000 yearly. In other words that Sheffield paid in 1892 for water supplied in place of milk, £4,868. This was largely due to the action of Somerset House, who, as referees, acted far too leniently. They had made the mistake of assuming the position of advocates for the defence instead of impartial advisers of the court. In his opinion, the number of samples ought to be very greatly increased, so that every shopkeeper should be visited at least once in six months, instead of as is the case now in many districts in England once in 50 years. He also urged that the Act should be extended to disinfectants, many of which were great rubbish. Carbolic disinfecting powder and carbolic soap often contained a mere fraction of the proper proportion of the active ingredients to which they were supposed to owe their value. In the case of milk it would be well if a milkman who pleaded innocence were compelled to have his farm visited, and the cows milked in the presence of an inspector. Then it would be seen if there were any justification for the plea that it was the cows that were at fault. The composition of milk varied within certain limits, and whether of the right quality or not was easily ascertainable.

A cordial vote of thanks was passed to Mr. Allen at the close.

THE LATEST YANKEE ADULTERATIONS.

We have received from the Massachusetts State Board of Health a summary of the results of the examinations of food and drugs by the State Board of Health in the month of December, and it is very instructive reading. It is an excellent record of work done in the public service by the authorities of this important State, and we should only be too glad to be able to make public similar reports from English counties, or to find that there was an equal public spirit among our own county and borough authorities in exposing the fearful frauds in food stuffs with which we are surrounded.

There were in the month 628 samples examined, of which no less than 187 were found to be adulterated, or varied from the legal standard. Out of 276 samples of milk there were the astounding number of 145 poor or adulterated samples, while of butter there was not found a single adulterated sample.

Spices and drugs seem to have been the most adulterated articles after milk, and some remarkable examples are given of the kind of stuff that is sold in dry goods stores of one district in the State—that of Fall River, where the swindling tradesmen offer gifts of open waggons, reclining chairs, and other articles to assist them in palming off their spurious goods. The interesting mixtures that were discovered by the State analyst included—

Pepper adulterated with 50 per cent. of wheat, buckwheat, nut shells, and other foreign matter.

Ginger adulterated with 25 per cent. of wheat and rice.

Mustard adulterated with 40 to 70 per cent. of wheat, rice, and turmeric.

Cinnamon adulterated with nut shells, peas, ginger, and pepper.

Cloves adulterated with nut shells, peas, ginger, pepper, and dirt.

These articles bore the brand of the Silver King Spice Mills, and were advertised by D. Lawrence Shaw, 62, College-place, and 72, Warren-street, New York.

After partaking of delicacies of this kind, the inhabitants of Fall River might very well be justified in rising as one man and setting fire to the Silver King Spice Mills, wherever they may be, as an institution dangerous to the health and life of the body corporate.

In other centres of the State, including Boston, Worcester, Cambridge, Somerville, Chelsea, Malden, Gloucester, Taunton, North Adams, Northampton, Brookline, Canton, Natick, North Brookfield, Randolph, Stoughton and Watertown, there were equally remarkable specimens of adulterated goods and "preserved" articles discovered, including a number of samples of canned corn bleached with sodium sulphite. The original sulphite appears in the finished product chiefly in the form of sulphate, but it is in such minute amounts that it can hardly be considered of importance. A "salt fish" preserved with boracic acid in addition to salt was found. The samples of drugs found to be adulterated were tincture of iodine, tincture of opium, red wine, white wine, citrate of iron, and quinine and olive oil.

Five complaints were entered in the courts during the month for violation of the laws relative to the inspection of food and drugs. Two of these were for violation of the statutes relative to the sale of coffee; one of butter, one of cloves, and one of mustard. Fines were imposed amounting to 135 dols.

We must congratulate Dr. Henry P. Walcott, the chairman, and Dr. Samuel W. Abbott, the secretary of the State Board of Health of Massachusetts, on their fearless exposure of the dangerous frauds which are enumerated above, and to repeat our regret that equally good work is not done by our own government authorities.

ADULTERATION PROSECUTIONS.

MILK.

The Notts. County magistrates, sitting at the Nottingham Petty Sessional Division at the Shire Hall on the 18th inst., adjudicated upon a prosecution instituted by Inspector Story. The magistrates on the bench were—Mr. J. L. Francklin (chairman), Mr. R. B. Bagnall-Wild, and Captain Holden,

John Worrall, farmer, Arnold, was charged with selling new milk deficient in cream to the extent of 13 per cent., on January 30. The case was supported by Inspector Story. Mr. Whittingham defended, and said his client had sold milk at Arnold for 40 years from his own homestead. The explanation was that the deficiency arose from exceptional circumstances in feeding the cows, or possibly from an irregularity on the part of his servant girl in removing some of the cream before the milk was sold. Opinions differed as to what quantity of cream should be present in milk. Inspector Story had admitted in his evidence that this was the first prosecution he had instituted since his appointment as inspector, and he was unable to say whether the deficiency complained of was an excessive deficiency or otherwise. The servant girl was called, and said she sold the milk that morning exactly as it came from the cows. The cows were milked at seven o'clock in the morning, and the sample was sold at shortly after nine o'clock. She did not take any cream from it. The cream had no chance to rise in the interval between seven and nine, because she was continually serving customers. The Bench, in the absence of information as to what was the standard upon which the analysis was taken, adjourned the case, the chairman remarking that it was a question of great public importance to know what quality the purchaser had a right to expect. It was the first case of the kind the bench had had before them. Adjourned for a fortnight.

At Lambeth, on the 9th inst., a milk dealer named Hanover was summoned for supplying milk to the Camberwell Infirmary which was alleged to have been adulterated. Mr. G. W. Marsden prosecuted, and Mr. Ricketts, solicitor, defended. It was stated that, on the morning of the 25th January, when some milk was delivered at the Infirmary, Inspectors Dewey and Groom took samples. They found that a churn of 7½ barn gallons the milk was perfectly pure, but in a pail containing about one gallon the milk was adulterated. Samples had been previously taken and found to be correct, and there had been no complaints whatever as to the quality of the milk before. Mr. Ricketts said his client, who was a highly respectable man, was perfectly innocent of the matter, and had always made it a practice to have a warranty with the milk he had from the farmers in the country. The solicitor pointed out to his worship that the milk in the churn was quite pure, and that the defendant was quite unable to account for any adulteration which might have been in the one gallon of milk. Mr. Biron said there was nothing to show that the defendant had a knowledge of the adulteration, but still he was liable, and ordered him to pay a fine of 40s. and costs.

At Lincoln City Police-court, Joseph Goodale, dairyman, 26 and 63, Steep-hill, Lincoln, was summoned for having adulterated new milk which was in the possession of his servant, Benjamin Goodale, for sale, on January 1st. Mr. H. K. Hebb, clerk of the Lincoln Urban Sanitary Authority, prosecuted, and Mr. Durance defended. William Smith, a farmer, of North Wykeham, spoke as to supplying the defendant with milk, and on the day in question his servant was supplied with about 12 gallons of milk. Francis Dalton, High-street, stated that on the day in question defendant supplied him with milk, and while doing so Sergeant Bradley came up and asked for a quart, for which he paid 3d. Benjamin Goodale, the servant, said the day in question was a Sunday, and after getting the milk from Mr. Smith he called at four different places on the way home, where he got some milk, all of which was put in the churn. He did not know whether there had been any water added before he received it, but there was none afterwards, and he brought it to Lincoln, and Mr. Dalton's was the first place he called at. Sergeant Bradley stated that when the sample of milk was analysed it was found to contain 10 per cent. of added water. The milk was taken from the churn. For the defence Mr. Durance submitted that the milk was obtained from five different places, and that if it had been watered it must have been done before coming into the possession of the defendant. The magistrate inflicted a fine of 20s., including costs.

At Swansea, on the 14th inst., Wm. Thomas, milk vendor, of Simon-street, in the employ of Mr. Perkins, appeared on an adjourned summons from the previous day for selling adulterated milk on the 5th inst. It was on the previous day alleged for the defence, that the milk must have been adulterated in transit on the railway. A clerk in the employ of the London and North Western Railway Company, named Williams, said he knew nothing whatever about the milk being adulterated, nor was there any complaint respecting the churn in question. Mr. Perkins had complained on previous occasions of his milk being tampered with, but the company had been unable to ascertain that it had. The Stipendiary said no doubt the milk had been adulterated, but as he was not convinced defendant put the water in it, he would dismiss the case against him.

At Leytonstone, John Jarvis, a dairyman, of Leyton-road, was fined £1 and costs for selling milk adulterated with 12 per cent. of added water.

W. Evans, of Union-road, was fined 10s., and 6s. 6d. costs for selling milk from which cream had been abstracted.

At the Borough Petty Sessions, Weymouth, Francis Adams, of Westham, was summoned for having sold adulterated milk to Frank Eacock at Weymouth on January 3rd. Mr. H. A. Huxtable stated by his advice defendant, for whom he appeared, pleaded guilty. Mr. Pelly Hooper stated he was prosecuting in this case. The case was one which the authorities had acted quite rightly in bringing forward. One-sixth part of cream had been abstracted, and so it was a very bad case; the liquid should have come under the heading of skim milk instead of new. Mr. Huxtable agreed with Mr. Hooper the police had done right in bringing the case forward, but he hoped the bench would deal with the case by simply admonishing defendant with a caution. The bench said as this was the first conviction they would dismiss the case with a caution on payment of the costs of the court, 6s.

William Gray, Westham, was summoned for allowing Georgina Gray, his servant or agent, to unlawfully sell to the prejudice of Frank Eacock a certain article (to wit milk), which was diluted with 35 per cent. of water and was not in the natural substance and quality and nature demanded by Frank Eacock on January 23rd, at Weymouth, contrary to section 6 of the Food and Drugs Act, 1876. Mr. Pelly Hooper prosecuted. Defendant, in answer to the Bench, said, "I suppose I must plead guilty." (Laughter.) He had sold milk in the town for over 30 years and had never been prosecuted before. He purchased a good portion of the milk from an outsider. Mr. Hooper, in stating the facts of the case, said the milk procured by the inspector under the Act contained 35 per cent. of water. Mr. Bowen: Nearly half water. Defendant: You must understand at this time of the year milk is not so good as in the summer. (Laughter.) The Bench considered the case a very bad one, and had defendant been in a larger way of business they would have inflicted the full penalty on him. This time, however, he would be fined £1, including costs. Defendant was about to make some explanation, when Mr. Rowe advised him to keep away from the water tap in future.

SENSIBLE FINES AT LAST.

At Westminster Police-court, on the 17th, Robert Hughes, of Stayton-street, Chelsea; Arthur Couchman, of Pimlico-road; Walter Arnold (for the Farmers' Direct Supply Company), of College-place, Chelsea; and George William Povey, of Ives-street, Chelsea, were respectively summoned by the Chelsea Vestry for selling milk, either deprived of its original fat or adulterated with added water. It was stated by Mr. Pemberton, who prosecuted for the Vestry, that a new departure had been made by the parish officials. In each case samples had been taken from milkmen when out in the streets. Arnold, for the company he represented, contested the analyst's return of 30 per cent. of fat abstracted, and obtained an adjournment to get an independent report from Somerset House. Povey, whose sample showed 6 per cent. of added water, was fined £5, and Couchman and Hughes £10 each, the magistrate remarking that really substantial fines would be imposed in all cases, as the chief victims were poor persons.

[We cordially congratulate the Chelsea Inspector on this good work, and are glad to see that at last some magistrates are helping in putting down fraud.—Ed.]

At Southampton, Harriet Tucker, of Station-road, Shirley, was summoned, under the Food and Drugs Act, for selling milk not of the nature, substance, and quality demanded, on January 24th. Mr. Bell defended. Detective-inspector Hack, of Winchester, said he went to the defendant's shop and asked for a pint of new milk. Defendant supplied him from a tin can on the counter. Witness gave further formal evidence, and put in the certificate of Mr. Arthur Angell, county analyst, which stated that the sample was deficient of cream by at least 40 per cent. Cross-examined: Defendant was going elsewhere for the milk, but I pointed to a tin from which a boy had been served. She did not say anything about the dairy. Sergeant Hawkins said the last witness, pointing to a can, said "I'll have it from here." Defendant replied, "All right, sir," served him with it, and took the 2d. There was no mention by Miss Tucker of fetching it from the dairy. Defendant: You tell dreadful lies! Cross-examined: I was not in uniform, but defendant knows me. The dairy was in the direction towards which the defendant made a half turn. In defence, Mr. Bell said this was a very hard and oppressive case, and he contended that the informant could not be prejudiced when he was served from a particular can indicated by himself. Had the defendant not been interfered with she would have gone to the dairy to get the new milk, but Hack really altered his order. A majority of the bench considered the offence had been proved, but imposed the lenient penalty of 5s., and costs 21s. 8d.

CONDENSED MILK.—IMPORTANT TO INSPECTORS.

At Swansea Police-court, on the 15th inst., Benjamin Waters, grocer, Pontellin, was summoned for selling a certain article of trade, to wit, condensed milk, which was not of the value demanded by the purchaser. Inspector Gidding proved the purchase, and the analyst's certificate stated that the milk contained 15 parts of whole milk and 85 parts of skimmed milk, and was deficient in butter to the extent of at least 85 per cent. In cross-examination witness stated that to the best of his recollection he was not shown two tins, one of which was cheaper than the other. There was a wrapper round the tin which he purchased. Mr. Kenshole, for the defence, pointed out that the Act required that the sample returned to the purchaser should be sealed by the analyst, and this in the present instance had not been done. The bench thereupon dismissed the case.

BUTTERMILK.

At Armagh Petty Sessions, on the 9th inst., Sergeant Hamilton prosecuted Thomas Stoops and Benjamin Stoops, farmers, for selling buttermilk on the 4th inst., adulterated with 12 parts of water in addition to the 15 parts allowed by Act of Parliament for churning. The defence was that the milk at the time of churning was frozen, and that no more water was used than was necessary. Professor Hodge's certificate having been produced, Thomas Stoops (by a majority of the bench) was fined 5s., and 10s. costs.

BUTTER AND MARGARINE.

At Nottingham Shire Hall, on the 18th inst., Anthony Riley, grocer, of Hucknall Torkard, was summoned for selling adulterated butter. He did not appear, but his wife was present. Inspector Story said the butter contained 12 parts of margarine. Mr. Parker Woodward, for the defence, submitted that the butter was sold in the same state in which the defendant purchased it. Under the Margarine Act there was special provision for such a case. Originally it was necessary to produce a written warranty that the article purchased by the retailer wholesale was butter, but that was often found to be inconvenient, and the production of the invoice was now considered sufficient. The defendant bought it as butter, paid for it as butter, and sold it as such. Mrs. Riley gave evidence as to the purchase of 12 lbs. of butter at 1s. 2½d., from Mr. Wyatt, a dealer at Hucknall. Mr. Woodward said the butter was traced back to a firm at Newcastle, and that firm got it from a Danish dairy. Captain Holden said somebody must be answerable, but he did not think much would be got out of the Danes. (Laughter.) Mrs. Riley said it was bought as Kiel butter, and a fair price was given for it. Captain Story said the sample was taken from a lump of butter in the cask. He had since taken a sample from an untouched cask, and was having it analysed. Mr. Wyatt deposed to having sold the butter to Mrs. Riley. It was part of a quantity he purchased from Newcastle. In consequence of this prosecution he communicated with the Newcastle firm, and the reply was that the butter was perfectly pure. Captain Holden said the bench believed that Mrs. Riley had no intention to defraud, but that was no consolation to the public. It did not make the butter any better. Mr. Woodward: No, but it might happen to anybody. We can only exercise ordinary precautions. The Chairman said the bench had come to the conclusion that if Mrs. Riley paid the actual costs of the prosecution it would be sufficient, but they wished it to be known that for the future those who sold that which was not butter, whether intentionally or by accident, would be punished. In this case the bench believed it to have been an accident. The public must be protected, and the defendant would have to suffer the consequences, but so far as she was concerned the bench did not believe she sold the article with a fraudulent intent, and they ordered her to pay the actual costs, 8s. Mr. Woodward: Then practically you find her case is made out? The Chairman: She has sold a mixture of stuff which was not butter, and if she by such inadvertence does that she must take the consequences. Mr. Woodward: Are you satisfied she did it innocently? The Chairman: She did it carelessly. Mr. Woodward: If you are satisfied she was the innocent vendor of this article she is not liable for costs. The Magistrates' Clerk: There is no conviction. The Chairman: We simply make her pay the costs. Captain Holden: She is liable to a penalty of £20. Mr. Woodward bowed to the decision of the bench, but respectfully submitted that she should not be asked to pay costs.

At Hampstead, on the 15th, Harriet Titchener, a widow, carrying on business in Flask-walk, was summoned by the Hampstead Vestry, under the Margarine Act, for having sold by retail a quarter of a pound of margarine without the word "Margarine" being printed on the wrapper. John Henry Leverton, an inspector under the Food and Drugs Act, deposed that on the 10th ult. he purchased at defendant's shop a quarter of a pound of "butter," for which he paid 4d. There was no label on the wrapper. The certificate of the analyst, Mr. Stokes, showed that it was "adulterated with 50 per cent. of margarine." Defendant said she bought it as pure butter, and sold it as pure. She had been imposed upon. Mr. Smith said that for the first offence a seller was liable to a fine not exceeding £20. Mr. Jennings said the vestry did not wish to press heavily on defendant. Would the bench ask her from whom she purchased it, so that the vestry might get at the real offender? In reply to the bench, the defendant gave the name and address of the wholesale trader, and said she paid 1s. a pound for it. She did not think she was buying a mixture at that price. She paid 10d. a pound for margarine, and kept a stamp to mark the wrappers. The food inspector said there was a ticket "Margarine" on another sample in the shop. The bench fined defendant 20s., but said that it did not appear to have been her fault.

MUSTARD.

At Eastbourne, on the 6th inst., John Hoadley, grocer, Seaside, was summoned, on the information of Joseph Paxton Humphery, for selling mustard, which was adulterated with not less than 30 per cent. of "farina" (flour). The Town Clerk (Mr. Fovargue) appeared to prosecute, and Mr. Lawson Lewis defended. Charles Winchester, a gardener, living at 9, Gilbert-road, said on the 16th December, at the request of Mr. Humphery, he went to Mr. Hoadley's shop for some coffee, mustard, and butter. An assistant served him with the coffee and mustard; no butter was served, as the assistant said they had no pure butter. He then went outside and called Mr. Humphery. Cross-examined: He went to the shop on purpose to trap the defendant, and "rather gloried in it" (laughter). Joseph P. Humphery, an inspector under the Food and Drugs Act, said he

went into the shop after the purchases were made, and told Mr. Betts (the assistant) he intended to have the coffee and mustard analysed by the public analyst. He divided the samples in the usual way, and sent them for analysis. The Clerk (Mr. Langham) here read the certificate of the public analyst, showing 30 per cent. of adulteration. Cross-examined: Witness was not aware the highest-priced mustards were preparations. Mr. Lawson Lewis took the preliminary objection that the purchase was made, not by the complainant (Mr. Humphery), but by the witness, Winchester. The Bench held that Winchester was merely an agent, and that as the inspector provided the money for the goods the summons was not bad. Mr. Lewis then addressed the Bench on the facts. He said he should prove that the defendant obtained the mustard from the wholesale house as pure mustard, and that it was delivered to him as such. Under these circumstances, he denied that the defendant could be held guilty of a fraudulent sale. The defendant, a grocer at 159, Seaside, said he obtained the mustard in question from Barry and Co., Finsbury. He ordered from them "fine mustard," and he sold it as such. He had no notice from the wholesale house that it was a condiment. He was paid a shilling a pound by the witness Winchester for the quantity he purchased. Pure mustard could be had at as low a figure as sixpence a pound. (Witness here put in the invoice for the mustard from Barry and Co. It bore an entry of "F. mustard at 7½d. per lb.") Mr. Lewis said he should submit that this invoice was in the nature of a written warranty, and that this exculpated the defendant from any responsibility. In cross-examination, witness said it was a fact that Colman's canisters specifically denoted when mustard was "genuine" or a "condiment." The Town Clerk quoted a case to show that an invoice was not "a written warranty" within the meaning of the Act. Mr. Lewis urged that the appearance of the letter "F" in the invoice, indicating that the mustard was "fine," amounted to a warranty, inasmuch as it expressly defined the nature of the article. The magistrates having deliberated, the chairman said they were bound to convict, as there was a palpable adulteration, and the nature of the mixture ought to have been stated. The penalty would be 40s., and costs 18s. 6d. He added that the maximum provided under the Act was £5. The defendant pleaded for a reduction of the penalty, but the bench pointed out that he had been previously convicted, and that he ought to have taken particular care that the goods he sold were unadulterated. They declined to alter their decision.

ALUM.

At Pontypridd Police-court, on the 15th inst., Superintendent Evan Jones, inspector Food and Drugs Act, summoned James James, of Blaenrhondda, for selling baking powder adulterated with alum. Mr. D. Lewis, barrister-at-law, Recorder of Swansea, instructed by Mr. W. E. R. Allen (deputy clerk of the peace for the county) prosecuted; and Mr. Blofeld (of the South Eastern Circuit), instructed by Mr. Lewis Tillet, London, and Mr. H. W. Stewart, Pontypridd, defended. Mr. Lewis, in opening the case for the prosecution, said that the summons had been issued under Section 3 of the Food and Drugs Act, for selling to Superintendent Jones a certain article of food, to wit, baking powder, mixed with alum. The question to be decided would be whether this admixture of alum was injurious to health if used in the manufacture of bread. Superintendent Evan Jones proved the purchase of the sample. The analyst's certificate stated that "this sample contains 39 parts of alum, and, in my opinion, the use of alum in bread is prejudicial to health." Dr. W. Morgan, the county analyst, was next called, and he deposed that the amount of alum was injurious to health. It formed into hydrate of alumina. Dr. W. Williams, M.A., M.B., B.Sc., M.R.C.S., F.C.A., &c., medical officer of the county, gave corroborative evidence, and evidence of a similar character was also given by Dr. Howard Davies, medical officer for the Pontypridd Urban Sanitary Authority; Dr. Alfred Evans, M.A., M.D., Pontypridd; Dr. T. H. Morris, Tylorstown, and Dr. Thomas, of Ystrad, all of whom declared that the constipation prevalent among the colliers in the district might be traceable to the use of alum in baking powder. Mr. W. H. Key and Mr. E. Matthews, chemists, Pontypridd, also gave evidence. For the defence Mr. Blofeld called Mr. Francis Sutton, a Fellow of the Chemical Society and public analyst for the county of Norfolk; Dr. Wynter Blyth, M.R.C.S., medical officer for Marylebone and public analyst for the county of Devon and the author of several medical works, and Dr. A. P. Luff, expert analyst for the Home Office, to prove that the hydrate of alumina could only neutralise a small portion of the gastric juice, and did not combine with the phosphates in the body. The alum and bicarbonate of soda, therefore did not prove injurious to the health if taken in baking powder, nor were they foreign bodies in the stomach which could not be immediately removed. These depositions were supported by Drs. Hunter and Leckie, of Pontypridd, and the bench after a protracted hearing, which lasted over six hours, gave it as their decision that there was no doubt in their minds that this stuff was the cause of constipation and indigestion in the district, for they believed that the evidence called for the defence did not disprove the allegations made by the prosecution. They would, therefore, impose a fine of £2 and costs. Mr. Blofeld gave notice of appeal.

BEER.

At Lindsey Petty Sessions, on the 17th inst., James Taylor, Atterby, was charged with brewing beer without a licence at Atterby, on November 30th. Mr. Everitt, supervisor of inland revenue, from Grimsby, prosecuted, and the magistrates dismissed the case on the ground that a farmer had a right to brew for a labourer residing within his house.

COFFEE AND CHICORY.

At Lambeth Police-court, on Friday, Mr. C. W. Palmer, of 207, Lambeth-walk, was summoned by Mr. H. T. Wiggs, on behalf of the Lambeth Vestry, for selling coffee containing added chicory to the extent of 50 per cent. The case for the Vestry was that the Inspector's assistant went into the defendant's shop and asked for a quarter of a pound of coffee, for which he paid fourpence. The coffee was supplied in a wrapper containing the announcement that it was a mixture of coffee and chicory, but the paper was so folded that these words could not be seen. For the defence the defendant stated that the purchaser was told that it was a mixture of coffee and chicory, and added that his assistants were directed to fold the wrappers so that the words on them should be clearly visible. Mr. Hopkins said he could not see his way to convict, and dismissed the summons.

Arthur Steven Jones, grocer, High-street, Wellington, was charged with selling coffee adulterated with chicory to the prejudice of the purchaser. Mr. Carrane appeared for the defendant, and objected to the case being heard on the grounds that coffee was a perishable article, and did not come within the Act, and that the summons was not served on defendant within a reasonable time after a sample of the coffee was taken. Both objections were overruled. Sergeant Edwards said on the 27th December last he visited the defendant's shop and asked his mother, who was behind the counter, for half a pound of best coffee. He received a packet, for which he paid 8d., and then he told Mrs. Jones that he intended to send it away to be analysed. Defendant afterwards went into the shop and asked which canister the coffee was taken from. It was pointed out to him, and he then said a mistake had been made, as the coffee supplied him was mixed. In reply to Mr. Carrane witness said he believed Mrs. Jones was 70 years of age and slightly deaf. He had seen her frequently behind the same counter. Police-constable Chester also gave evidence. Mr. Carrane submitted that there was no case, inasmuch as the proceedings were not taken under the direction of the local authority, which was necessary under the Act. Mr. Jones was then called, and stated that on the day in question he kept open the shop without the assistance of his ordinary staff, and his mother, who was that day behind the counter, would not know which canister contained the pure coffee. Defendant was fined 1s. and costs.

At Lindsey Petty Sessions, held at Lincoln, on the 17th inst., Joseph Hatfield, Normanby-by-Spital, was summoned under the Food and Drugs Act for selling coffee adulterated with 10 per cent. of chicory, on January 16th. Mr. W. T. Page prosecuted, and said that the section of the Act of Parliament under which proceedings were taken, laid down very distinctly that any person should be liable to a fine who sold to the prejudice of the purchaser any article of food not of the nature, substance, or quality of the article demanded. That was to say, if they asked for one thing and got another, then an offence was committed. He pointed out that although the label stated "chicory and coffee," the label afforded no protection, as the bulk of added matter was so out of proportion to the article sold. In this particular case the added matter was 80 per cent., and he contended that if the added matter exceeded 50 per cent. it was not an honest mixture. Police-constable Ward proved the purchase of the coffee, and Superintendent Dain said the public analyst had certified that the coffee contained 80 per cent. of added chicory. Mrs. Hatfield, the wife of the defendant, said that when the constable asked for coffee, she told him that they did not keep coffee, but that they sold a mixture of chicory and coffee. In reply to the Chairman, the constable said the tin had not been opened when he bought it. Another witness for the defence said that she heard Mrs. Hatfield inform the constable that it was chicory and coffee, and that they did not keep coffee. The magistrate inflicted a nominal fine of 1s., but did not attribute any fraudulent intention to defendant. He had sold it as he bought it, but in the interests of the public it was necessary to take notice of such articles.

WHISKY.

At Lindsey Petty Sessions, on the 17th inst., Edward Goodyear, Glentham, was summoned under the Food and Drugs Act for selling whisky 10 degrees below the strength allowed by law. Police-constable Ward proved the purchase of the whisky, and Superintendent Dain stated that it had been certified to be 35 degrees under proof, or 10 per cent. below what is allowed by law. Fined 6d., and 7s. costs.

GIN.

Richard Brown, Belle Vue Inn, Belle Green-lane, was summoned on the 10th, for selling adulterated gin. Sergeant Scott called at defendant's house and purchased a quantity of gin. A sample was submitted to Dr. Campbell Brown, who certified that it was a mixture of gin and water 4½ per cent. under proof. Defendant, who admitted the offence, was fined 20s. and costs.

RUM.

A SOLICITOR'S IMPUDENCE.

George Payne, landlord of the Britannia-hotel, Station-street, was summoned by the police for having, on January 21st, exposed for sale by retail a certain article called rum, and that when inspector Hack applied to him to purchase some of the rum, and tendered to him the price of half-a-pint, stating he required it for the purpose of analysis, Payne had refused to sell it. Defendant, for whom Mr. P. E. L. Budge, of Poole, appeared (instructed by the Poole and South Western Licensed Victuallers Association), pleaded not guilty. Walter Hack deposed that he was a detective-inspector

under the Food and Drugs Act, and that on Saturday January 21st, about 10 a.m., he visited the Britannia Inn, kept by the defendant. On entering the bar he asked for threepennyworth of rum, which the defendant supplied him with from a glass bottle which was standing on the bar. Witness paid him for the rum, and then asked for half-a-pint to be placed in a bottle for him. Defendant went to draw it, in fact he did draw some from a jar standing on a shelf in the bar, and witness said, "I want to be supplied from the same bottle that I had the threepennyworth from," and then informed the defendant that he was an Inspector under the Food and Drugs Act, and required the sample to submit it to the public analyst for analysis, at the same time tendering to defendant a 2s. piece in payment. Defendant said, "No, I shall not serve you from the bottle, but the jar." Witness again asked defendant, saying, "You have already served me with threepennyworth, and why not serve me with the half-pint?" Defendant said, "No, I shall not serve you from the bottle," and witness having ascertained defendant's name left the house. Mr. Budge: I take it you are an officer of the Hants Constabulary? A.: I am. Q.: And that you do not live in this neighbourhood? A.: I do not. Q.: Have you any special directions from the authorities in this case? A.: No, I am directed verbally by the Chief Constable. Q.: Did you have directions from the Chief Constable in this case? A.: No, I use my own discretion where I take samples. I have no special direction or instruction with regard to any particular case. Q.: Therefore, as regards this case there was no special direction? A.: No. Mr. Budge: Very good. Well now, Mr. Hack, I agree pretty nearly to the whole of the facts. You had 3d. of rum, which you drank, and that no doubt warmed you up to the work which you were after. (Laughter.) Now the jar that you saw Payne take this from was on a shelf? A.: It was. Q.: And it was an ordinary china jar—there were three of them, I believe labelled Rum, Gin, &c., from which the general public would be served? A.: Yes, but not at all times—I wasn't. Mr. Budge: Very probably they thought you wanted something extra good. I should if I saw you. (Laughter.) Witness: There were the usual jars on the shelf marked with the different spirits. Q.: And when you asked for half-a-pint of rum he went and filled it from the rum jar? A.: He did. Q.: But that didn't quite suit your fastidious taste—you thought you would prefer it out of the bottle? A.: I did. Q.: He didn't refuse you with rum? A.: No, but he refused me the rum in the bottle to which I was entitled. Mr. Budge pressed the witness to show by what authority he was "entitled," and this witness failed to do. Q.: How long have you been at this work? A.: Five years. Q.: Can you give me the smallest authority, after all your experience, for showing that anybody, presuming they are appointed in law—showing that any officer has a right to go into a house and say, I will have it out of that bottle and no other. A.: Yes, where it is exposed for sale. Q.: Can you show me that authority? A.: I could if I had my books. Mr. Budge: Then you ought to have your books here. I have mine, and why have you not yours. Q.: Were you in uniform? A.: No. This was the case, and Mr. Budge, for the defence, said after a long experience—twenty years practice before magistrates, and more particularly in these licensing cases, as an advocate, clerk to the justices, and magistrate—he had never in his life had to deal with a more extraordinary proceeding than this. The Sale of Food and Drugs Act was to prevent the sale of adulterated articles, and in this case, when the police-constable asked for rum he had been supplied with it under ordinary circumstances. He contended that when the constable refused to have it from the jar the landlord was perfectly right in saying, "If you don't take that you will have nothing at all." Further, there was no evidence that Hack was a police constable, and the defendant would have been perfectly justified if he had not served him at all, as it had been laid down in the case of the Queen v. Rymer that publicans were not bound to supply anybody unless they chose to do so. Hack was a perfect stranger to the defendant, and was not in uniform at the time; he had not gone there armed with a direction from the local authority to take these proceedings, neither did he go there with any papers or document, showing he was a specially appointed inspector, and Mr. Budge went on to say that according to the *Justice of the Peace* it was necessary that constables must have special directions from the local authority. In the absence of this the defendant had been justified in refusing, as there was nothing to show him that the man Hack was a duly appointed inspector, but presuming that he did know, he (Mr. Budge) urged that even then, he was acting within his right in saying, "Here's the rum, take it away and analyse it as much as you like; if you find it wrong I must stand the racket of it." He urged that the Inspector had no right to select where the rum should be supplied from; there was nothing in the Act allowing this. It was a question of whether, when the constable asked for rum, he was refused to be supplied, and Inspector Hack himself admitted that the defendant offered to supply him. He submitted that first no authority was shown for taking these proceedings, and secondly that there had been no refusal to supply the drink, that rum had been ordered and that rum was drawn, and as there had been no refusal to supply he claimed that the defendant was entitled to the court's judgment in his favour. The magistrates retired, and after a brief consultation they returned to the court, and the Chairman said the Bench were of opinion that the Inspector ought to have been served out of the same bottle as the threepennyworth of rum was supplied from; it would not do to have one bottle for analysis and one for the general public. They convicted the defendant, and fined him £2 and 9s. costs. Mr. Budge: I will ask in this case that you grant me a case. The Chairman: Oh, yes, certainly.

CIRCULAR NOTES.

FOREIGN AND COLONIAL MEAT.

Major Rasch asked the First Lord of the Treasury, on the 16th, whether the Government would give facilities to a short Bill having for its object the compulsory labelling of foreign and colonial meat.

Mr. Gladstone said the object of marking foreign goods was to prevent imposition, but the question of trying how far the system was applicable to foreign meat had not as yet been very thoroughly examined. He had understood that it was reserved for inquiries which had not yet taken place. The Government would be glad to give facilities for such inquiries.

MORE SANITARY INSPECTORS WANTED.

A correspondent writing to the *Daily Chronicle*, says:—

SIR,—In your issue of to-day's date you comment on the utter laxity of the Rotherhithe Vestry in attempting to carry out its sanitary duty with only one inspector for a population of over 39,000. I should like to point out that Rotherhithe does not stand alone in this respect. In Paddington we have three sanitary inspectors with a population of 117,838, which gives an average population of 39,280 to every inspector.

Yours faithfully,

A. A. STEPHENSON.

90, Inverness-terrace, W., February 20th.

Rotherhithe—which is one of the poorest of London districts took last year only 26 samples for analysis, and its Vestry, in addition to neglecting its sanitary duties, neglects the Food Acts. How such a disgraceful Vestry can pretend to be democratic passes our comprehension.

THE ASTON PRESS ON THE ASTON SANITARY INSPECTOR.

The *Aston and East Birmingham News* of January 21st, in a tribute to the excellent and beneficial work of the chief sanitary inspector, Mr. Benjamin Bolt, says:—"Those who remember the disgraceful manner in which the food was tampered with in the days prior to the passing of the Adulteration Acts, will read Mr. Bolt's report with interest." Aston was the home of the adulterator, and if every defence set up were true, then Aston received milk from cows that gave larger per-centages of water than did similar quadrupeds in any other portion of the globe.

"Had the manor possessed a less active and valuable servant than Mr. Bolt, there is every reason to believe that the reign of fraud would have been as rampant to-day as it was ten years ago." The journal concludes that "to no one but Mr. Bolt is due the fact that Aston is more free from adulterators than any other town of a similar size, in the United Kingdom, and for this Mr. Bolt has won for himself the high esteem of every honest tradesman."

This is the sort of character every sanitary inspector should strive to earn, and if the press would, as in this instance, not only recognise the great importance of earnest work, but by its powerful influence assist in untying the hands of the many earnest inspectors who are hampered and find their good work for the community stultified by corrupt vestry gangs, there would be very quickly seen a saving of millions of pounds in public money and of thousands of valuable lives. A sanitary inspector or food and drugs inspector in such places, for example, as St. Martin's-in-the-Fields, has no more real chance to protect the public than a food and drugs inspector has in Norfolk. In each case his hands are tied, and he is practically garrotted by corrupt local authorities. The scandalous state of the entire food supply of the Eastern counties is in itself a significant refutation of the arguments used by Mr. J. J. Colman, M.P., to the sanitary inspectors against centralisation.

ALUM IN BAKING POWDER.

A self-styled analytical chemist writes the following unblushing lie to our contemporary the *South Wales Daily News*:—

"In the Pontypridd baking powder case the public have one of those not unusual conflicts of medical and scientific opinion which from time to time puzzle and perhaps somewhat amuse the sceptical lay mind. A clear appreciation of the difference may, however, be obtained if it be considered that the question at issue was not really one of the healthiness or otherwise of alum in bread, but of the healthiness of sodium sulphate. The essentials of the baking powder were alum, or sodium aluminium sulphate and sodium carbonate. The baking powder acts by the decomposing effect of these chemicals one on another. The alum breaks up the carbonate in the presence of moisture, and, whilst free carbonic acid is disengaged and lifts the dough into its proper spongy condition, the sodium of the carbonate combines with the sulphate of alum; and in the finished bread, if the baking powder be properly constituted and the bread properly made, there is not a trace of alum. Alum added to inferior flour, with the fraudulent intention of producing bread rivaling in appearance that made from first-class flour, undergoes no decomposition, and is present in the finished article as alum."

THE BOARD OF AGRICULTURE AND TUBERCULOSIS.

We have often asked what the Board of Agriculture is doing to earn its salaries. It was a circumlocution farce under Mr. Henry Chaplin, and it seems to have grown lazier, if such a thing were possible, under Mr. Gardner. Dr. Bott, on the 17th, introduced a deputation from the London County Council asking for powers to slaughter cows affected with tuberculosis, and to give compensation to owners out of Imperial funds. Dr. Bott said that their inquiry in the London cowsheds had brought out the fact that there were many animals actually diseased, and that the milk of these animals during their life, and their flesh after they were slaughtered, were sold as human food. Recently twelve cows had been sent up to a London slaughterhouse to be killed, and it was found that their lungs were one mass of disease. It was well known that there were certain slaughterhouses in London where animals of this description formed a large proportion of those slaughtered. It was impossible to dress the carcasses of those twelve animals in the ordinary way, and portions of the flesh were either salted to disguise its condition, or stripped from the bones and made up into what was technically known as "block ornaments" for sale in poor districts. The Council had done everything to improve the sanitary surroundings of London cowsheds, but still the number of cows affected with tuberculosis was very great. Some recent experiments made by the Board of Agriculture had shown that this disease was transmitted to human beings through the flesh of infected animals, and that ordinary methods of cooking were found insufficient to destroy the bacilli, and also that the virus of the disease was communicated to the human being through milk. They believed that if the Board of Agriculture applied to tuberculosis measures similar to those applied to pleuro-pneumonia, a remedy would to a great extent be found. The compensation to the owner ought to be paid for out of money voted by Parliament.

The reply of our heaven-born Minister of Agriculture was that no legislation dealing with the meat and milk of animals suffering from tuberculosis would be attempted until the report of the Royal Commission was issued, and a flippant smack at the London County Council for its attitude over the glanders and farcy question. Such is the amount of help public health in London gets from the department. How much longer will the report be in coming to the public?

CORRESPONDENCE.

To the EDITORS of FOOD, DRUGS AND DRINK.

THE WESTMINSTER GAZETTE'S HIGHLY PLACED AUTHORITY.

SIR,—The public have had rather too much of the disreputable cow, to which your verdant confrère directs public attention. I have seen it produced at meetings of the Society of Public Analysts, by gentlemen strangely solicitous for the right of certain large milk dealers to water their supplies. The abnormal bovine has lowered from the pages of the wretched milk analyses published by Dr. James Bell, F.R.S. It has apparently now multiplied itself into a statesman's herd, and the vagaries of the wretched animal threaten, like Tennyson's brook, to go on for ever. This is very sad, because the disgrace to its species has given employment to every pump in the country, and has become a Juggernaut to which millions of public money are sacrificed. It has corrupted the never very stern morals of the milkman who, but for it, and official asses like the one the Westminster interviewer unearthed, would have walked clothed in the garb of honesty, knowing naught of annato, and using starch only for a linen as spotless as his character.

It even showed its cloven hoof in the speech of Dr. Cameron, M.P., where the proper course to pursue regarding it was promptly and well suggested by Dr. Turner. "Poleaxe it," said he. Well poleaxed it would be dead, and as incapable of harm as Somerset House is of analysis. Poleaxe it say I, and I would ask your contemporary to aid in the necessary annihilation of the bovine impostor, were it not that I sadly fear that the *Westminster Gazette* is like the immortal "Vert Vert," of whom the genial Prout said, "Green were its feathers, green its pinions, and greener still were its opinions." The statesman's herd is really a ridiculous piece of twaddle, as a near relation of the statesman, himself an agriculturist and M.P., was fain to confess that whatever the statesman might know of politics, he knew little of cattle, and the herd was more worthy of pole-axing than milking. Yours, etc.,

ANTI-HUMBUG.

THE SOMERSET HOUSE SCANDAL.

The *Daily Chronicle*, February 17th, says:—

"Good ought to come from the meeting of public analysts which we reported yesterday. The adulteration laws are in a thoroughly unsatisfactory state, and steps should be taken to amend them on the lines laid down at the meeting, the main points of which are—(1) the inclusion of the wholesale dealer or manufacturer under the Act—at present the retail trader is the scapegoat; (2) the imposition of heavier penalties; (3) provision by the Local Government Board for the enforcement of the Food Acts, which are inoperative in many districts. The last report of the Local Government Board shows how crying is the need for administrative reform in the matter.

The *Standard*, February 17th, says:—

"The reforms approved by the Society of Public Analysts will be carried into effect one day. Dr. Cameron rightly says that 'a Bill on these lines ought to be easily passed,' but he is more hopeful than could be expected of a member of Parliament, if he expects that the House would be so eager to do its duty just yet. It was pointed out at the meeting that local authorities do not exercise their power, 'because they consist of traders, who are not likely to set the law in motion against themselves.' They have also votes and influence to be conciliated by our legislators. The alterations suggested are thorough. If a chemical department be attached to the Board of Trade, of which all public analysts shall be officers paid by the funds of the State; if the inspectors be allowed free access to the warehouses of wholesale dealers to take samples in bulk; if every retail dealer be assumed to sell a pure article, unless he make a written declaration to the contrary; and if the Acts be amended all round to make the process of detection easier, and the penalties both more severe and more certain—then, no doubt we shall have honest value for our money, if we enter a 'respectable' shop. May we all live to see the day! But the chairman was quite mistaken in asserting that all the statutes dealing with adulteration of food and drugs are not more than twenty years old. The old laws, Imperial and local, on the subject are numberless. So long as Elizabeth's day, the author of a famous pamphlet, 'The Wealth of England,' complained that 'many good laws have been made but there is no execution of them.' Just as we complain now."

The *Pall Mall Gazette* has the following:—

"A correspondent writes:—The Society of Public Analysts and Dr. Bell, the head of the Somerset House Laboratory, are at loggerheads on the subject of analyses in connection with prosecutions under the Adulteration Acts. It appears that in dealing with samples of milk and butter, local analysts base their calculations on average purity and Dr. Bell his on minimum. In the case of milk the local man would argue that if a sample contained 15 per cent. of cream and the average yield were 25, the probable extent of adulteration was 10 per cent. Dr. Bell, on the other hand, would, it seems, certify that as milk containing less than, say, 20 per cent. could not be pure, the sample in question was certainly adulterated to the extent of 5 per cent. This is the safer and more logical conclusion, and it is scarcely fair to ask Dr. Bell, as the analysts do, to add to his certificate a statement as to averages. If (keeping to the milk illustration) evidence be required respecting the proportion of cream that milk contains under ordinary circumstances, it can easily be obtained from other sources. Meanwhile, the discussion discloses a fact of importance to the public—namely, that owing to this difference in procedure prosecutions frequently fail, and that while scientists dispute consumers suffer."

[It is a great pity such stuff as that of the *Pall Mall* correspondent should find its way into print.—Ed.]

The *Southern Echo*, February 20th, says:—

ADULTERATION REFORMS.

Among the manifold public duties carried on in that palatial pile of architecture which lies between the Strand and the Thames, known as Somerset House, are those of the government analyst. This department, which, from its connection with the State, enjoys exceptional influence, has more than once come into conflict with the Society of Public Analysts in reference to matters connected with the adulteration of food, and the split at this moment is rather wider than usual. It relates to the wording of the Somerset House certificate in doubtful cases as to the adulteration of milk; but for the public, the chief matter of interest is that out of the dispute is developing a crusade by the Society of Analysts for the thorough reform of our adulteration laws. One of its demands is that a properly-constituted chemical department should be attached to the Local Government Board, with whom the public analysts should be placed in direct relation. Another of the reforms which the society will insist upon is the protection of the retail trader, who has often been made the victim of the fraudulent conduct of the wholesale dealer who supplies him with goods. To accomplish this reform, heavy penalties will be insisted upon against the wholesale dealer, who will also be assumed to sell with a warranty. The Food Acts being in a great measure a dead letter, an effective application of them will be called in for the interest of the public. If the society does not allow its reforming zeal to wane it will earn the gratitude of all consumers.

ANALYSTS' REPORTS.

DR. SEDGWICK SAUNDERS ON SOMERSET HOUSE.

The report of Dr. Sedgwick Saunders, the public analyst to the City of London, states that 123 analyses were made in 1892, namely, 27 in the first quarter, 31 in the second, and 65 in the fourth quarter. They included 18 of bread, 2 of butter, 2 of coffee, 12 of coffee mixtures, 29 of disinfectants, 52 of milk, 2 of tea, and 6 of well water. "Of the 29,028 samples dealt with in 1892, no less than 23,851 were collected by officers of local authorities, the remaining 177 samples being obtained from private purchasers, or 1 in every 164, equal to 0.609 per cent. We learn from the Local Government Report that of the total number of samples examined 12.2 per cent. were adulterated, but of the 177 from private purchasers no less than 34.5 per cent. were adulterated. The explanation of this discrepancy is twofold, first from the fact that the inspectors, being personally known in their districts, and the object of their visit being well understood, would only be supplied with fairly good articles, whereas the private purchasers would not incur the trouble and expense of procuring samples unless they had *prima facie* grounds for suspecting them to be impure." Regarding the Food and Drugs Act, the report goes on to say: "The law respecting the Food and Drugs Act continues in a very imperfect condition, and no hope can be entertained of their being worked in a satisfactory way until some amendment takes place. The provision at present existing for determining disputes between public analysts and fraudulent dealers still rests with a self-constituted department at Somerset House. There would be no objection to this if the said department were to lay down proper methods of procedure on the one hand and afford limits for comparison on the other, but until this is done public analysts will not submit their reputation to an arbitrary authority who may work upon data about which they know nothing. In the absence of this check discordant results are reported by public analysts of repute on the one hand, and the chemical authorities at Somerset House on the other, both operators probably being right upon the particular standpoint from which they base their results. Repeated attempts have been made to remedy this discrepancy, which, I regret to say, have not met with the cordial co-operation on the part of the Somerset House chemists." Appended to the report is a copy of some correspondence between the Society of Public Analysts and Dr. J. Bell, F.R.S., principal of the Inland Revenue Laboratory, Somerset House. Dr. Sedgwick Saunders reports most favourably on the samples of water submitted from the artesian well in Aldgate, and those from the artesian well at the Manchester Hotel, Aldersgate-street.

LEICESTER COUNTY COUNCIL WAKING UP.

At the last meeting of the Leicester County Council, the analyst (Dr. Emmerson) reported that during the quarter, 66 samples of food and drugs had been submitted to him for analysis. All the bread was genuine wheat bread, free from alum or any adulteration. Four samples of olive oil were mixtures of olive oil and cotton seed oil. Five samples of spirits of sweet spirits of nitre were made with methylated spirit instead of spirit of wine, and three contained less than the proper amount of nitrous ether.

Mr. Burgess said there was a feeling amongst many dairy farmers that a good deal of adulterated butter was placed on the market. It seemed to him that this was a matter which had been entirely overlooked. The British Dairy Farmers' Association applied to the Minister of Agriculture on the subject, and was referred to the County Councils. He should like an instruction to go from the Council that the inspectors should pay more attention to the matter.

The Chairman said that at the present moment Dr. Emmerson had samples of butter and milk and margarine for analysis. The inspectors were bound to deal with different classes of articles in turn. They could not cover all the articles with the Act at one time. The analyst was now dealing with dairy produce, which had been purchased by agents.

The report was then adopted.

Mr. T. Worthington moved and Mr. Pochin seconded "That the Board of Agriculture be again urged to promote a Bill in Parliament, compelling vendors of Foreign and Colonial meat to label it as such before exposing it for sale."

The resolution was carried and the proceedings terminated.

The Kesteven County Council seem to be as apathetic as ever about adulteration. At the last meeting Alderman Sharpe moved the adoption of the Sanitary Committee's report, from which it appeared the county analyst, during the quarter ended 31st December, 1892, had analysed 20 samples, of which 10 were adulterated and 10 were genuine. Action had been taken in six cases, and the offenders fined. The report was adopted, as also were the minutes of the General Purposes Committee, without discussion.

BRITISH INSTITUTE OF PUBLIC HEALTH.

The Lord Mayor opened a largely-attended conference of medical men and others interested in the laws of public health, convened by the British Institute of Public Health, at the Mansion-house on the 18th inst. It included delegates from Liverpool, Birmingham, Birkenhead, Belfast, Bristol, Cardiff, Cork, Chester, Coventry, Dublin, Edinburgh, Glasgow, Hull, Newcastle-on-Tyne, Swansea, Portsmouth, and Sunderland. Among those present were:—Dr. R. Farquharson, M.P., Dr. Ernest Hart (British Medical Association), Dr. Lovett (Incorporated Society of Medical Officers of Health), the Rev. Dr. Wace (President of King's College), Surgeon-Lieutenant Colonel Beamish (Woolwich Arsenal), General Moberley, Major-General Sim, and Dr. W. Collingridge (medical officer of the Port of London). Mr. Bailie Crawford, chairman of the Health Committee of Glasgow, was appointed president of the conference.

Dr. Duncan, president of the Sanitary Association of Scotland, addressing himself to the subject of the education of sanitary inspectors, pointed out the need for a better system of training, and strongly advocated the introduction of examinations which would prevent incapable inspectors from being appointed to positions of responsibility. Dr. Duncan then moved a resolution to the effect that the provision of the Public Health (London) Act, 1891, requiring that sanitary inspectors appointed under the Act should be holders of a certificate showing that they had by examination shown themselves competent for such office, was calculated to afford an important additional safeguard to the public health and should be extended to the Health Acts applicable to the United Kingdom generally; and that a central board of examiners ought to be formed to conduct the necessary examinations and grant certificates.

Dr. J. W. Moore, Vice-President of the College of Physicians in Ireland, expressed himself as thoroughly in accord with the terms of the resolution.

Dr. Wace supported the resolution, and pointed out that although the Sanitary Institute did not possess the means for giving a full scientific instruction to those who desired to qualify for responsible positions under public bodies, courses of lectures were being given and certificates granted by that institute. King's College had received £10,000 for the purpose of establishing departments of public health and the giving of lectures upon the general duties of a sanitary inspector; and the County Council had been recommended to make a grant of £150 a year to King's College and £350 a year to other institutions in order that this course of instruction should be further developed. The Plumbers' Company had been in communication with King's College with a view to the establishment of an advanced course of science lectures, and he felt sure that whatever so representative a meeting deemed necessary for the better education of sanitary inspectors would be provided in answer to those demands by the authorities of the University Colleges.

After further discussion, in which Dr. Farquharson, Dr. Taylor, (Liverpool), Dr. Dudfield (medical officer of health for Kensington), and others took part, the resolution was adopted with unanimity.

Dr. Vacher, medical officer of health for Cheshire, moved:—"That this congress of delegate representatives of the sanitary authorities of Great Britain and Ireland is desirous of recording its opinion that the systematic training, examination, and registration of plumbers is essential to the protection of public health, and that a statement embodying this opinion should be presented as a memorial to Parliament, coupled with an expression of the further opinion of the congress that the Plumbers' Registration Bill should be passed into law at the earliest opportunity in the interest of public health."

The resolution was adopted without opposition, as was also a motion in favour of its being made compulsory on local authorities, either separately or in conjunction with neighbouring health authorities, to provide accommodation for isolation and treatment of infectious diseases. It was agreed that copies of the resolutions should be embodied in suitable form for transmission to the various departments of state and chairmen of sanitary authorities throughout the kingdom, under the signature of the Lord Mayor.

The conference closed with a vote of thanks to the Lord Mayor, who afterwards entertained the delegates at luncheon.

At Arbroath, on the 10th inst., at a meeting of the Finance Committee of the Police Commission, an account by Mr. Macdougald, public analyst for the burgh, for analyses of milk was submitted. In reply to a question the sanitary inspector stated that the analyses were undoubtedly of much public benefit. Councillor Michie pointed out that the value of the analyses would be greatly enhanced from a public point of view if the names and the addresses of the parties who purveyed the samples were published along with the results. After some conversation, it was arranged that in future the analyst's reports should be brought before the Committee and the Board with the view of having the names and addresses and the qualities of the milks entered in the minutes, so that an opportunity would be given for their publication in the newspapers.

ST. GEORGE'S VESTRY AND ADDITIONAL SANITARY INSPECTORS.

Mr. Williams, chairman Hornsey Local Board, lately said that it was lamentable that people were still to be found who would rather live in stinks than pay a little money for pure air and healthy surroundings. He must have had gentlemen like Mr. Owensmith, of the St. George's Vestry, in his mind. At the last meeting of this Vestry

The Committee of Works recommended that a third sanitary inspector be appointed, whose duty shall be to inspect the workshops, including the residences of out-workers in the parish. That the duty of purchasing samples for analysis be divided amongst the three inspectors, acting under the direction of the Sale of Food and Drugs Acts Committee, through the Chief Sanitary Inspector.

Mr. Adkins moved the adoption of the recommendation.

Mr. Owensmith said that that they all knew that he was opposed to any needless expenditure, and he should therefore oppose the appointment of a third sanitary inspector. Speaking of the duties of the inspector, he said that he always understood that an Englishman's home was his castle. He protested against an official being allowed to enter private dwellings in the manner proposed. He supposed, however, that the Vestry must have a craze. It was scandalous that because a person did work at home a man should be allowed to poke his nose into it. People talked about Home Rule. (Laughter.) Where was the liberty of the subject in this case? (Laughter.) He moved that the part referring to private dwellings be left out.

The Clerk pointed out that the recommendation was the outcome of an order issued by the Home Secretary. If they did not appoint an official, the County Council had power to step in and appoint one for them.

Mr. Owensmith's amendment was not seconded.

Mr. Tolly urged the necessity of the motion. There were many houses in their immediate neighbourhood where work was being done that should be inspected. He knew of a case in St. George's parish where a widow, her son (a labourer), a daughter, a domestic servant out of employment, and three children were living in two rooms.

Mr. Gray moved as another amendment, that the whole of the recommendation, with the exception of that part referring to the appointment of the official be omitted. (Oh!) While he approved of a third sanitary officer, he did not agree as to the duties he was to perform.

This was not seconded.

Mr. Saunders spoke in favour of the motion.

Major Grimston said that by the Public Health Act of 1891, the Vestry were responsible for the sanitation of every house in the parish. They had since found that their staff was not large enough for the increased duties.

The motion was then put and carried, no one voting against it.

We know a more scandalous thing than that instanced by Mr. Owensmith, which is, that gentlemen of his mind should be members of any vestry. They should be at school learning the first principles of sanitation.

NORWICH AND THE ADULTERATION ACTS.

There is a sublime though unconscious humour about the following remarks of a correspondent of the *Eastern Daily Press*, writing on the 6th inst., which is hugely entertaining. He says:—

"I was not aware we had a sanitary inspector in Norwich until I read Saturday's police report of two licensed victuallers being proceeded against for selling diluted spirits below the strength allowed by the Food and Drugs Act. I trust the inspector will keep a vigilant eye all round. My object in writing you is to remark that many grocers and confectioners hold licenses precisely the same as the recognised publican, and are subject to the same police supervision. Some grocers are agents for the large bottling spirit merchants, and openly sell spirits 10, 15, and 20 per cent. below the strength allowed by the Act. True, the strength in some cases is indicated on each bottle, but whether this exonerates the sellers I cannot say. No notice that spirits are diluted is placed in the shops. In many cases the names of persons licensed are not fixed on the premises—persons neglecting the latter are liable to a penalty of £10."

We were in the same position on this question as the ingenuous correspondent. We, too, had been wondering whether there was a food inspector in Norwich, and we had waited for long to see a report of a prosecution for adulteration in the city. We know that Norfolk has a public analyst, and judging from the quantity of adulterated stuff that is manufactured in that county, there ought to be plenty of work for him to do. We sincerely hope that the above cases will not be exceptions, and that the Norwich authorities will give the Sanitary Inspector a chance of protecting the public from fraud, but with such magisterial asses as those who tried these cases we must candidly say that there is neither encouragement to the Inspector to do his duty—even were the authorities to allow him—or protection for the public. Perhaps Mr. Colman, M.P., will lecture them upon their duties?

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SATURDAY, MARCH 4, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE PUBLIC AND SCIENTIFIC RESEARCH.

Now and then, out of the mass of ill-digested opinions that flood the daily press, we come across a more than usually crude one, as witness the *Westminster Gazette* of the 28th ult., which says :—

"Contrary to all predictions we have influenza back again. Are the authorities going to do anything for us in the way of help or prevention? Last year there was a fortnight when to get a doctor was a difficulty, and to get a nurse an impossibility, and this state of things may return. We have had three years' experience in all parts of England, town and country, and in all classes of society. What knowledge of the epidemic results from all this sickness? We look for guidance in the coming crisis, and we have a right to expect it. If there were a visitation of cholera or typhoid, or even of small-pox or diphtheria, health officers would bestir themselves; we should learn a little what precautions to take and how to act in emergency.

"But influenza has been more fatal in the last three years than typhoid, small pox, and diphtheria put together, and yet we know little or nothing about it. Presumably the faculty do. They certainly ought, for they have had extensive and varied experience. Such learning as there is should be made public. Of course every drug-vendor will advertise his infallible cure. But what we want, and what we have a right to expect, is an authoritative statement from some source that shall command the public confidence. And if the latest idea is well founded, that the disease is highly infectious, we want rules laid down and enforced to prevent the spread of it."

We quote the above as typical of the attitude of the ordinary mind towards scientists generally. The health officer and the experimental chemist are expected to be ever alert, always testing, analysing, and casting about to discover the cause of this disease, or that fraud, and the public, who are too careless and selfish to pay scientists for such work, are exactly voiced in the demand of the *Westminster Gazette*: "We look for guidance in the coming crisis, and we have a right to expect it." It would be interesting to know on what grounds the public claims such a right. With a few exceptions, the health officer's salary is one that we do not suppose the *Westminster Gazette* would have the meanness to offer to the youngest reporter on its staff. Accrington, for example, having 33,603 population, pays its medical officer of health £80 per annum, and scores of towns in England pay sums of £30 or so per annum. The average health officer, eager as he is in the investigation of the causes of disease, is in scores of instances in the position of being asked to make bricks without straw. The stern necessity of earning a living, gives him no time to pursue investigations which, however important they may be, and beneficial to the public, would cost more money than he can afford, and would not bring him, unless the result were an unusually brilliant discovery, either recompense or recognition of any kind. It may be said that we have a medical department at the Local Government Board. True, but that department is neither lavishly paid nor adequately manned, and the medical officers attached to it have more than enough to do in their Sisyphean task of striving to compel local authorities to supply pure water and healthy surroundings for the inhabitants of the scores of parishes throughout the country whose sanitation is a disgrace to our civilisation. The public press itself, also, might well be asked what amount of encouragement it has given to the scientists to make investigations. We are afraid it would have to answer very little, for a considerable portion of it has given its columns over to a gang of fanatics to howl at medical men, accuse them of being monsters of cruelty, and of being blindly devoted to ignorance. Through all this abuse medical men have quietly gone their way, doing such good work as lay to their hands, and regretting that they were hampered in their efforts to do more. Take, again, the case of the public analyst, whose years of unselfish work to secure pure, wholesome food for the public have been availed of by that public as a matter of right. How much recognition or assistance in investigation has the public analyst received? None whatever; but rather the reverse, for he has been paid by his authorities wages lower than those of a labourer, and has had, through his fight for the public welfare, ever on his back that "old man of the sea," Somerset House, to destroy and make impotent his work. In butter analysis, the public has availed itself of discoveries that have saved it hundreds of thousands of pounds, but the analysts who in this matter enriched science, have had to do so at their own expense, and often under the greatest difficulties. Every analyst knows the need for a State-endowed department for scientific research, and [how such a body could] not only advance science, but protect the public and save it millions of money, but what help have the public press given to such a demand? With a few exceptions (of which the *Westminster Gazette* is not one), it has given none whatever. It has, in the main, ignored this most important of questions, and just in proportion as it is ignored so will disease and fraud flourish.

ADULTERATION PROSECUTIONS.

MILK.

At West London Police-court, on the 23rd ult., Mr. Enderby Handsley, who traded as the Callow Park Milk Company, appeared to answer a summons at the instance of the Hammersmith Vestry in respect of milk which was sold containing thirteen parts of added water. Mr. Besley, instructed by Mr. Bingham Watson, appeared to support the summons, and Mr. Ricketts for the defendant. In this particular case the inspector in the employ of the Vestry purchased a pint of milk off a man in the Uxbridge-road, the barrow with the churn having been sent out from the Notting-hill depot. Mr. Ricketts relied on the warranty which the defendant received from the farmer who supplied him with the milk. He stated that the defendant was the largest trader of milk in London, having 400 churns daily, bought with a warranty from each farmer. He submitted that the practice absolved the defendant from any accusation that he was a careless trader. Mr. Curtis Bennett then called upon the defendant to trace the milk. Mr. Ricketts called witnesses, who gave evidence of the receipt of the milk at the railway station, its delivery at the Notting-hill depot, and the sending of it out with the carrier. It was also stated that it was the practice to take samples of the milk for analysis, and the particular farmer in question always supplied good rich milk. The carrier was also called, and he stated that he sold the milk in the same state as he received it. Mr. Besley addressed the magistrate on the question of law as to whether it was the warranty for this particular milk. Mr. Curtis Bennett said it was a question of fact. He thought it was a good warranty, and that the defendant had taken every caution. He dismissed the summons.

At Derby, on the 21st ult., Frederick Knight, a farmer, of Mickleover, was summoned for selling milk which on being analysed was found to be adulterated to the extent of 5 per cent. The defendant, who gave evidence on his own behalf, denied that the milk had been in any way adulterated. His cows had been fed to a great extent on mangolds, turnips, and grains, which were known to greatly increase the quantity of water in milk, and he thought might account for the 5 per cent. It was not "added" water. Mr. Stone applied for the permission of the bench to have the samples of milk under notice sent to Somerset House, and the case adjourned pending their certificate. The Town Clerk opposed this on the ground that there was not sufficient evidence to permit of such a course, and contended that such a length of time had elapsed since the samples were taken, that chemical actions had very much altered the milk, and it would be eminently unfair to send it to Somerset House under such conditions. The Bench refused the application, and imposed a fine of 1s. and costs.

At Nottingham Summons Court, on the 21st ult., Edward Collington, of Wymeswold, Leicestershire, farmer, was summoned for selling milk which was not of the nature and quality demanded by the purchaser. Mr. Deane, of Loughborough, was for the defendant, and Mr. Harris prosecuted. Henry Howitt, local manager of the Farmers' and Cleveland Dairies' Company, Limited, said that he made a contract with the defendant in October last for a supply of milk at 9½d. per gallon. The contract terminated on January 18th. He went to the Midland Railway on January 28th, and saw Inspector Byrns take samples of the milk directed to the company. Witness sampled both churns, and found 15 per cent. of water. Inspector Byrns having given evidence, Mr. Deane called several witnesses, who said that the milk was not tampered with, and Mr. Fisher, a milk dealer, said that the milk he received from the defendant had not been tampered with. Defendant was fined 40s. and costs.

At Bournemouth Petty Sessions, on the 16th ult., John Jenkins, a dairyman, of Boscombe-park, pleaded guilty to a charge of selling adulterated milk on January 18th. Detective-superintendent Hack said that he bought the sample at the defendant's shop and that the analysis showed it was adulterated with 12 per cent. of added water. The defendant's son told him that it was that afternoon's milk. The defendant said that the milk was not what he usually had from the dairy, and urged that it was not adulterated by him. It must have been supplied to him in that state. A fine of £3 and costs 18s. was inflicted.

At Liverpool, on the 22nd ult., Elizabeth Simpson, a milk dealer at 2, Goodall-street, was fined £3 and costs for selling milk which the public analyst's report showed to contain 25 parts of water to every 100 parts of the poorest milk. Defendant had previously been convicted, and fined 10s., and 40s. and costs in July last. Mr. Moss prosecuted, and the case was proved by Inspector Baker.

At Westminster Police-court, on the 10th ult., before Mr. de Rutzen, John James Kibble, of 10, Dartrey-road, was summoned by the Vestry of Chelsea for selling to Inspector Grant milk which contained 10 per cent. of added water. Mr. C. Pemberton appeared for the Vestry. Mr. de Rutzen said it was always poor people who were defrauded. Water was easily enough got, and if they wanted to mix the milk with water they could do it themselves. The defendant was fined £5 and 23s. costs.

[We are glad to see that fines are becoming in London more in harmony with the gravity of the fraud.—Ed.]

On the 24th ult., at Clerkenwell Police-court, John Tucker, farmer, of Avenue-farm, Grelton, Kettering, Northampton, was summoned by Joseph Osborne, sanitary inspector for St. Pancras, for sending a consignment of milk to London, which, on arriving at the Midland Railway terminus, St. Pancras, was found to be adulterated with eight per cent. of added water. Defendant pleaded

guilty, and said water had been added to the milk by a dishonest servant, whom he had discharged on receipt of the summons. Mr. Horace Smith inflicted a fine of £10 and costs.

At the Guildhall, Norwich, on the 27th ult., William Hare, Southwell-road, Lakenham, was summoned by Sanitary Inspector Brooks for selling adulterated milk. Complainant stated that on February 2nd, he visited defendant's premises, and purchased "a pint of new milk" of Mrs. Hare. He told her he had bought it for the purpose of analysis and he divided it into three parts, one of which he left with her. Another he submitted to Mr. Crook, public analyst, who certified that it was adulterated with 16 per cent. of added water. For the defence, Mrs. Hare stated that she sold the milk as she received it. She bought half-a-gallon each morning; if that were sold during the day, she purchased an additional two pints. She emphatically denied that any water was added to the milk. Asked by the Bench where she obtained her supply, Mrs. Hare replied that her son was a milk-seller, and she bought of him. The Bench pointed out that defendant was responsible for the quality of the milk she sold, but they had no desire to deal harshly with her. She was ordered to pay 1s.

George Sharpe, 61, Ber-street, was summoned by Sanitary Inspector Brooks for a similar offence. In this case the milk was found adulterated with 20 per cent. of added water. The same defence was pleaded by defendant, who called his daughter Edith. She averred that the milk sold the inspector was in the same condition as when received from the farm of Mr. Cotton. Asked by the Bench if he bought the milk as pure milk, defendant replied that he was not aware that he could purchase any of superior quality. (Fined 1s., and ordered to pay 7s. costs. The Mayor added that the Bench were determined to protect the public, and persons summoned in future for such offences would be severely dealt with.)

BUTTER.

At Rochester City Police-court, on the 11th ult., Robert Wilfrid Dale, grocer of Strood, was summoned under the Food and Drugs Act, for selling to Superintendent Broadbridge an adulterated article on December 29th. Mr. R. Prall, town clerk, appeared to prosecute, and Mr. Bassit defended. As the case was ordered by the Watch Committee, the Mayor (Councillor F. F. Smith), and Alderman Dampier retired from the Bench. Police-constable Gower proved the purchase of the butter, on behalf of the superintendent, who was Inspector under the Food and Drugs Act. He asked for butter, but admitted that the bulk from which he was served was labelled margarine. He asked for shilling butter, but admitted that defendant told him that it was a mixture of margarine and butter, and that the paper in which it was labelled was properly marked. Mr. Bassit contended that pure butter could not be sold at 1s. per lb., and that the complainant had been told so before the contract was completed. The Bench agreed that this was fatal to the charge, but after retiring to consult their clerk, said they must convict under the terms of the Margarine Act, but they were unanimously of opinion, that there was no intention on the part of Mr. Dale to contravene that Act. They fined him 5s., and 12s. costs. Mr. Bassit asked for a case for a higher court, and as Mr. Prall did not object, it was granted.

At the Brentford Petty Sessions, on the 11th ult., before General Tremenhoe (in the chair) and other magistrates, Arthur George Machin, who was summoned in the name of Matthews, of High-street, Hounslow, was summoned for having sold butter adulterated with 70 per cent. of foreign fat, and also with having sold margarine which was not labelled as such. Mr. Beck prosecuted on behalf of a body of wholesale traders; Mr. C. Robinson defended. The case presented some unusual features, a Mr. Gardner, of Blackfriars, having been instructed by the prosecuting solicitor to purchase butter at the defendant's shop for the purposes of analysis. Mr. Gardner, with his daughter, accordingly went to Hounslow, and the latter was sent into the defendant's shop for half a pound of "shilling butter," for which she paid sixpence. The butter was handed to the father, who informed the defendant that it was purchased for analysis. The defendant then blamed the assistant for having supplied the wrong butter. The analyst's certificate showed that the article sold contained 70 per cent. of foreign fat. Mr. Robinson, for the defence, asserted that the prosecution was undertaken at the instigation of other grocers in the town because the defendant, dispensing with the middleman in purchasing his goods, was able to sell at a cheaper rate. He called the assistant who sold the butter in question, and who said he was engaged to serve at the grocery counter only, but in the absence of the assistant from the other counter, and to oblige the young lady, he supplied her on this occasion. A label bearing the word "margarine" was stuck in the lump of butter, but he did not see it. The defendant gave similar evidence, and said the label could be seen by the purchaser, but not by the assistant. The magistrates fined the defendant £10. Mr. Robinson asked the magistrates to reduce the amount of the fine, but the chairman replied that the sentence already pronounced was the decision of the court.

At Pontypridd, on the 15th ult., before the Stipendiary (Mr. Ignatius Williams), Mr. T. P. Jenkins, and Mr. W. Morgan—a green-grocer, named Albert Dodds, living in Pwllgwawn, Pontypridd, was charged by Superintendent Jones with selling adulterated butter. A ½lb. of butter was purchased by Supt. Jones at defendant's shop for 3½d., and this, when analysed by Dr. Morgan, was found to consist of 40 per cent. butter and 60 per cent. margarine. Defendant, who said he bought the margarine as butter and sold it in the same condition as he received it, was fined £1 and costs, amounting in all to £2 10s. 6d.

MARGARINE.

At Castle Eden Police-court, George Birkett, manager of the Rosevale Butter Company, Front-street, Haswell, was summoned for an infringement of the Margarine Act. Mr. B. Scott Elder, chief inspector, stated that on February 2nd he was driving past the company's premises when he saw several pats of what appeared to be butter offered for sale, no label being attached to them. The pats were marked with various prices. Witness said his assistant entered the shop and asked for half a pound of the eightpenny butter. The manager, in reply, said that they had no butter at 8d., but they had margarine. Witness asked for the butter in the window marked 8d. a lb. The manager replied that it was not butter, but margarine. Witness asked where the label was, and the manager replied that it must be at the back of the butter, but witness failed to find it. There were no labels attached to any of the pats offered for sale, and thereby the section of the Act which provided that labels should be put on margarine was infringed. Witness purchased half a lb. of the stuff in the window, which defendant said was margarine, and which defendant wrapped up in a margarine paper. Witness called the defendant's attention to the fact that the labels did not comply with the Act, and defendant pleaded ignorance of the law. He produced other labels, however, which were satisfactory. He also expressed his intention of fixing them at once to the pats. Witness remarked that it was highly desirable that a company which made a specialty of the sale of butter and margarine should have the chief provisions of the Margarine Act prominently shown in their shops, and that their servants should know exactly what the law provided. The Bench said that they had no power in the matter, but the suggestion was an admirable one. Defendant expressed his regret, but said that he was ignorant of the law. The Bench remarked that the offence was a serious one. They fined defendant £1 and costs.

[We cannot reconcile the smallness of the fine with the magisterial remark as the offence being serious. Such penalties make a farce of the Act.—Editor.]

LARD.

At the Tynemouth County Petty Sessions, on the 20th ult., Elizabeth Morrissey, grocer, Willington Quay, was summoned for selling to Superintendent Taylor, an inspector under the Food and Drugs Act, 1lb. of lard, which, according to the public analyst's certificate, was adulterated with about 55 per cent. of cotton seed oil and beef stearin, on the 25th ult. The defendant stated that she bought the lard for pure lard, and sold it in the same condition as it was in which she purchased it. The merchants from whom she purchased the lard had, she said, undertaken to reimburse her for any penalty that might be imposed. The magistrates said they would impose a fine of £1 and costs, and informed the defendant that she had a legal claim upon the merchants.

At the same Court, Stanley, Twiddle and Co., grocers, Howdon, were summoned for selling 1lb. of lard, which was adulterated with about 15 per cent. of beef stearin, and a similar penalty was imposed. In this case, it was stated, the defendants had a written guarantee that the lard was pure, and the merchants were therefore liable to refund the penalty.

SPIRITS.

In the Summons Division of the Central Court, Sydney N.S.W., on 30th November, before Mr. C. Dolohery, Inspector Lenthal summoned Henry Bacchus, licensee of the West End Hotel, George-street, under section 89 of 45 Victoria, No. 14, for knowingly keeping on such licensed premises liquor mixed with a deleterious ingredient, injurious to health. Mr. C. Bull appeared for the prosecution, and the defendant pleaded not guilty. Inspector Lenthal stated that on October 24 he went to the premises occupied by defendant, and obtained samples of the draught brandy, whisky and rum kept for sale. The samples were sealed up in defendant's presence, after being taken from bottles exposed in the bar. The samples were subsequently handed to Mr. Hamlet (the Government Analyst) for analysis and report, and upon the report being received the information was laid against the defendant. W. M. Hamlet, Government analyst, stated that on October 24th he received from Inspector Lenthal a sealed bottle marked "Henry Bacchus, West End Hotel, George-street West, draught rum." He analysed the contents of the bottle, and found the gravity of the distillate to be .9532, containing 32.6 per cent. absolute alcohol by weight, or about 68.5 per cent. of proof spirit, equivalent to 31.5 per cent. under proof. Besides the ordinary alcohol of the rum he found evidences of the constituent parts of methylated spirit, which rendered the rum totally unfit for human consumption. It would produce delirium and stupor. Inspector Lenthal asked that a heavy penalty should be inflicted, as cases of the kind were very difficult to bring into court. This was the first he had obtained out of nearly 600 hotels visited. He had lately heard that whisky was being imported at 1s. 4d. per gallon, and it was such rubbish that caused nearly all the cases of drunkenness brought before the police courts. It was inferior liquor that caused all the misery amongst the unfortunate men who had to obtain their refreshment from public-houses. Selling adulterated liquor was worse than Sunday trading. The Bench inflicted a penalty of £20, with £3 19s. costs added, or, in default, two months' imprisonment.

At Keighley, on February 24th, Joshua Smith, landlord of the Cross Roads Inn, was summoned for selling adulterated spirits. Mr. Arthur Randerson, district inspector under the Food and Drugs Act, stated that he visited the public house, of which Smith is the landlord, on the 25th January last. He called for one glass of Scotch whisky and one glass of gin. He paid for them, and then asked for

one pint of each. Mrs. Smith, the landlady, wanted to get some fresh spirit out of a decanter, but he told her he preferred it out of the same vessel as before. After some hesitation, she served him. He divided each spirit into three parts, retaining one part for himself, handing another to the landlady, while he forwarded the third part to the county analyst. On the 12th inst., he received two certificates from the analyst, certifying that the Scotch whisky was 32½ degrees under proof, and that the gin was 40½ degrees under proof. The standard of proof fixed by law was 25 for whisky, and 35 for gin, and in the present cases there was an excess of ten parts of water. For the defence, Mr. Naylor pleaded guilty. The magistrates clerk said the maximum penalty was £20 in each case. The Chairman said the Bench were of opinion that the more spirit was diluted, the better—(laughter)—but, on the other hand, the law was to be upheld. The defendant had evidently been making an unreasonable profit by adding water to spirits sold by him. He would be fined 20s. and costs in each case, and the Bench trusted he would let this be a warning.

WHISKY.

At Selby Petty Sessions, Mary Ann Beardsley, of the Neptune Inn, Selby, was charged with selling adulterated whiskey. Mr. J. K. Burton, solicitor, Selby, appeared for defendant, who admitted the charge. Mr. W. H. Wilson, Inspector under the Food and Drugs Act, deposed that he visited defendant's premises on the 4th January and purchased a quantity of gin and whisky, which he duly forwarded to the West Riding analyst, who certified that the gin was 51½ degrees under proof, and the whisky 32½ degrees under proof. Mr. Burton, in asking the Bench to deal with the case leniently, said that the liquor was taken by the defendant from the previous tenant. The spirits, for which there was not much call at that house, had not been tampered with by the defendant, but was in the same condition as when taken over from the out-going tenant. The Bench inflicted a penalty of 1s. and £1 5s. 1d. in each case.

At the St. Augustine's Petty Sessions, on the 11th ult., Moses Fryer, landlord of the Bridge House Inn, St. Stephen's, was summoned on two charges of selling adulterated gin and whisky. The Superintendent of Police for the Home Division produced the report of Mr. Adams, the county analyst, showing both the gin and the whisky to be adulterated. The defendant, for whom Mr. H. Broughton appeared, denied that he had ever adulterated any spirits kept in his house, as also did his wife and daughter. The Bench, however, convicted, imposing a penalty of 5s. and 13s. costs, in the first, and 5s., and 10s. costs in the second case.

At Southampton, on the 16th ult., James Johnson, landlord of the Victoria Hotel, Netley, was summoned for selling adulterated rum on January 24th. The defendant pleaded guilty. The analyst's certificate showed that the rum was 30 degrees under proof. The Bench inflicted a penalty of 10s., and the costs.

On the 22nd ult., at the Heywood Borough Police-court, James Jackson, landlord of the Summit Inn, Heady Hill, was summoned for selling adulterated rum. Sergeant Wilcox proved purchasing a pint of rum on the 18th ult. Analysis showed that the rum was 28½ per cent. under proof. The defence was that the rum had been mixed in the kegs for about a couple of months, and it had evaporated. Defendant was ordered to pay the costs, and informed that he had it in his own power to keep up the rum to the required strength.

BEER.

At the South-Western Police-court, London, on the 21st ult., George William Edwards, landlord of the Clarence public-house, Winstanley-road, Clapham Junction, was charged with adding to a cask of beer four gallons of water. Mr. Edwards found the explanation ready. The potman was short-sighted, and unfortunately did not wear spectacles. He mistook the sweetened water intended for mixing with the gin for ale, and poured it into the beer-cask. This act caused his employer to be fined £20.

ALUM IN BAKING POWDER.

AN APPEAL FROM PONTYPRIDD.

At Pontypridd Police-court on the 22nd ult., Mr. H. W. Spowart, on behalf of the manufacturers of the "Excelsior" baking powder, who were fined last week for selling baking powder adulterated with alum, applied for leave to appeal at the quarter sessions against the decision of the magistrates, and also to submit sureties for costs. Notice of appeal had already been given. The Stipendiary pointed out that he was afraid it would be an expensive affair, especially as both sides intended to bring specialists. A long discussion took place as to the sureties, and ultimately Mr. Tillett, the solicitor for the defence, deposited a cheque for £150, and two sureties for £50 each were bound over.

VINEGAR.

At the Stipendiary's Court, Hanley, on the 13th ult., William Alfred Simmill, grocer, Longton; Walter Berrington, grocer, Tunstall; Grace Leese, greengrocer, Longton; and James Howell, greengrocer, Stoke, were summoned at the instance of Mr. E. W. H. Knight, inspector under the Adulteration of Food and Drugs Act, for selling, as malt vinegar, an article which was not of the nature, substance, and quality of the article demanded. Mr. Fisher, barrister, appeared for the prosecution, on whose behalf it was stated that the article sold by the defendants was not vinegar at all, but a cheap coloured substitute, being simply diluted pyroligneous or acetic acid. The defendants denied that they sold the article as malt vinegar; but said they regarded it as vinegar, and were not aware that they were doing any harm in selling it as such. Mr.

Jones, county analyst, pointed out that the article did not come under the head of vinegar, as defined by the Pharmacopœia. Leese and Howell, who stated that they bought the vinegar from a Hanley firm, were fined 20s. and costs each, and were informed that they could take proceedings against the firm in question to indemnify themselves. Simmill and Berrington, who were said to have made the adulterated articles themselves, were each fined £10 and costs.

COFFEE.

At Westminster, on the 3rd ult., The Westminster Industrial Co-operative Society, of 14, Strutton-ground, Westminster, were summoned by the local vestry for selling as pure coffee a mixture containing forty per cent. of chicory. The manager of the defendant society said an employé had acted against orders. Mr. de Rutzen: We know in whose pocket the profit goes. These frauds must be stopped. The manager: This is a co-operative society, owned by working people. The magistrate: A greater shame that working people should be defrauded. You are fined £5 and costs.

At Lambeth Police-court, on the 10th ult., Ellen Phillips, Dorset-street, was summoned for selling milk adulterated with 13 per cent. added water, and fined 10s. and 12s. 6d. costs.

At North London Police-court, on the 23rd ult., Albert Webb, grocer, of Boleyn-road, Kingsland, was summoned by the Vestry of St. Mary, Islington, for selling as coffee a mixture adulterated with 90 per cent. of chicory. The case was proved by William Ward, an inspector under the Food and Drugs Act in the employ of the Islington Vestry, who said he asked for "shilling coffee," and got the mixture in question. The defendant pleaded that he sold the coffee just as he got it from the wholesale man. Mr. Bros: You should protect yourself by having a warranty with your purchases. 10s. and costs.

On the 22nd ult., at Clerkenwell, Edwin Blake, grocer, of 8c, Drayton-park, Holloway, was summoned by the Islington Vestry for selling a quarter of a pound of coffee which was found, when submitted to the public analyst, to be adulterated with 50 per cent. of chicory. Inspector Pain proved the purchase of the article. Defendant said the coffee was sold as a mixture. No one expected to get pure coffee at 1s. a pound. If the inspector wanted pure coffee he should have said so. Mr. Horace Smith: If a person asks for coffee he expects coffee, and not a mixture. You must pay a fine of 20s. and costs.

MUSTARD.

At Cirencester, on the 20th ult., William John Hayes, grocer, of Cricklade-street, Cirencester was summoned for selling, on the 25th January, a quarter of a pound of mustard adulterated to the extent of 12 per cent. with wheat starch. He pleaded guilty, and was dismissed with a caution.

On the 22nd ult., at Clerkenwell Police-court, Charles Moss, grocer, of 42, Caledonian-road, N., was summoned, at the instance of the Islington Vestry, for selling a quarter of a pound of mustard which was found, when analysed, to be adulterated with 20 per cent. of added starch. Inspector Cowling proved the purchase of the article. Defendant pleaded guilty, and said the mustard was sold in mistake. He had recently made alterations behind his counter and had shifted the position of several drawers. His assistant sold the mustard out of the wrong drawer by mistake. Mr. Horace Smith inflicted a fine of 10s., and costs.

COCOA.

At the Clerkenwell Police-court, on the 22nd ult., Henry Thorn, a grocer, of 83, Grove-road, Islington, was summoned before Mr. Horace Smith, at the instance of the Islington Vestry, for selling on the 11th January adulterated cocoa. Sanitary Inspector Watson said he visited defendant's shop on the day in question, and asked for a quarter of a pound of cocoa. Mrs. Thorn, who was serving, inquired whether he required Epps' or Fry's, and he replied, "I want loose cocoa." He paid 3d., and then said he was an inspector and had purchased the article for the purpose of analysis. At Mrs. Thorn's request he divided the cocoa into three parts, sealing and labelling each. One part he sent to the public analyst, and his certificate showed that the cocoa was adulterated with an admixture of 40 per cent. of sugar and 15 per cent. of starch. Cross-examined: After the purchase Mrs. Thorn wanted to label the article. Mr. Thorn was in the shop at the time. While Mrs. Thorn was serving him witness heard defendant say to another person in the shop, "This is chocolate powder. We cannot afford to sell pure cocoa at 1s. a pound." He did not ask for 1s. cocoa. Mrs. Thorn said, "What will you have, 1s., 1s. 4d., or 1s. 8d.?" and he replied, "Shilling." The tin from which he was served had upon it "Rowntree's Chocolate Powder." He could not say whether pure cocoa could be purchased for 1s. a pound. Did not know it cost 1s. 8d. Mr. Brown, who defended, said the article sold to the inspector was a chocolate powder, which was a mixture of cocoa, sugar and arrowroot. Pure flake cocoa could not be sold under 1s. 8d. a pound. He contended that the inspector had not been deceived, as the fact that the article purchased was chocolate powder had been brought to his notice. Mr. Horace Smith said it was evident that the inspector knew he was purchasing chocolate powder, and dismissed the summons.

Jane Coomber, grocer, of 79, Prebend-street, N., was also summoned by the Islington Vestry for selling a quarter of a pound of cocoa which was adulterated with an admixture of 20 per cent. of added starch. Inspector Rolfe proved the purchase of the cocoa. Defendant said the inspector only paid 1s. a pound for the cocoa, which in reality was chocolate powder. She only had a small business. Mr. Horace Smith: You must be careful to sell persons exactly what they ask for. Taking into consideration that you are a

poor woman, I shall only inflict a small penalty, but you must be more careful in future. You are fined 5s. and costs.

At the same court, Charles C. Davis, grocer, of 12, Westbourne-road, N., was summoned by the Islington Vestry for selling a quarter of a pound of cocoa which was adulterated with an admixture of 40 per cent. of sugar and 15 per cent. of starch. Inspector West proved the purchase of the article. Defendant asked him what price he wanted, 1s., 1s. 4d., or 1s. 8d., and he replied 1s. Cross-examined: He did not see the words "Chocolate powder" upon the tin from which he was served. Defendant said it was impossible to sell pure cocoa for 1s. The inspector knew that perfectly well, and must have seen the words "Chocolate powder" on the tin from which he was served. He would like to call his wife, and asked for an adjournment. Mr. Horace Smith adjourned the summons for a week.

SODA WATER.

Inspector Tyler, of Brentford, whose successful prosecution of Epps' Cocoa we recorded a few weeks ago, had an important case at Brentford Petty Sessions, on the 18th ult., against S. J. Dalton and Charles Bance, for supplying adulterated soda-water.

Mr. S. J. Dalton, of the Coach and Horses, Ealing, was defended by Mr. Horace Browne, who admitted at once that there was no soda or bicarbonate of soda in the article. The samples were merely charged with carbonic acid gas. "If the public got the real article," said Mr. Browne, "they would not like it." (Laughter.) He called several trade witnesses to prove that the public palate was adverse to the genuine article, and as long as the soda-and-milk and soda-and-brandy drinking souls were satisfied, the trade, of course, had no cause to be otherwise.

GREAT PROFITS ARE MADE

according to the evidence of "experts." The manager to Messrs. Hilton, the manufacturers, said that 1½d. worth of bicarbonate of soda was sufficient to "charge" 100 dozen 10oz. bottles of water into "double soda." Single sodas, retailed at 4d. a bottle, contained, as had been admitted, no soda at all, but merely carbonic acid gas.

Inspector Tyler: Now, if a doctor ordered a patient soda water, I take it that he would get aerated water?

Witness: Aerated water is called soda water. (Laughter.)

Then the patient is not supplied with soda? Not unless it is specially ordered.

Dr. Hartshorne, for the defence, said that soda water (pure) was more injurious to the public than aerated water. He should not order soda water for an invalid because it contained soda, but on account of the carbonic acid gas it contained.

The Chairman subsequently put this question to a "trade" witness. The landlord of an hotel if asked for a bottle of soda by a person, what would he serve? "Aerated water," answered the witness. It was further stated that "the public

DIDN'T KNOW DIFFERENT,"

but now that the prosecution had stepped in it would mean a deal of trouble and "revolutionising" to the trade all over the country.

Mr. Hudson, mineral-water manufacturer, deposed that he had had 12 years' experience in the trade, and he found that people did not want "soda-water"; moreover, the "soda-water" did not contain soda, it being destroyed by the carbonic acid gas.

The Chairman announced that the Bench were convinced that the defendants must be convicted, but they did not think there was any intention to defraud, and they would therefore only inflict a nominal fine or penalty of 10s.

Notice of appeal was given.

The defence was untrue, inasmuch as makers of repute invariably make soda-water according to the formula, and the composition of soda-water is further clearly laid down in the trade instruction books. Bratby & Hinchliffes' recipe for soda-water, for example, is 1 oz. carbonate of soda to 10 gallons water. That there is a great amount of carbonated water containing no soda whatever sold to the public is quite true, and those drawing it from rubbishy patent machinery instead of bottles such as are in use at Spiers & Ponds buffets and on many of our first-class steamers, invariably supply the drink without soda. Now that Inspector Tyler has successfully prosecuted for this offence, the large refreshment caterers might well be compelled to sell aerated water for what it really is, and give soda-water to those who demand it.

William Howker, baker, Sun-street, Haworth, was summoned at Keighley, on February 24th, for a breach of the Bread Act, 1836, namely, delivering bread in a cart without being provided with scales and weights. Defendant pleaded guilty. Mr. A. Randerson, inspector of weights and measures for this district, said he was in Cavenish-street on the 30th of January, when he met a servant of William Howker, named Farnall, delivering bread from a cart. He questioned the driver about the scales and weights, and he replied that he had left them at home—forgotten them. Witness asked him if he had any more bread to deliver, and he said that he had about three dozen loaves to dispose of: some of the bread was ordered. He told the driver that he should report him. He had previously cautioned him (last July) for a similar offence. Defendant said the driver had simply neglected to take the scales and weights with him. He knew that his assistant was cautioned in July; then, also, it was neglect. Mr. Randerson said that as this was the first case of the kind in that court he did not ask for the full penalty of £5. He might say there was a deal of bread sold without being weighed. The Bench imposed a fine of 5s. and costs, remarking that future cases would be treated with severity.

CIRCULAR NOTES.

LOOK ON THIS PICTURE: AND ON THAT.

At the last monthly meeting of the East Sussex Farmers Club, the serious effect on the dairy farming industry of the continued and unchecked sale of separated milk, butter substitutes and butter mixtures was strongly condemned, and the following resolution was adopted:—

That in the opinion of this meeting steps should be taken to prevent the sale of skim and separated milk as pure milk; that steps should be taken to prevent the continued adulteration of butter by the use of margarine; and that it be suggested to the Central and Associated Chambers of Agriculture that the Adulteration and Margarine Acts be amended if necessary, and that the authorities in the towns and counties be urged to put the present Acts more strictly in force.

This reminder to the Central Chamber of Agriculture is very necessary, but we must admit that the task of that institution, or of any which attempts to deal with this crying evil, is almost hopeless in the face of such specious advice as is contained in the remarks reported in the following paragraph which we take from the *North British Agriculturist* of the 23rd ult.:—

At a meeting on Monday night of the Edinburgh Association of Science and Arts, Mr. George Redpath, Leith, read a paper on "Margarine." As a substitute for a secondary or cheap butter, he said margarine was a great benefit to the working classes, as by using that instead of secondary butter they would be studying their own interests. He next considered margarine blended with various proportions of pure butter as a substitute for fine butter, pointing out that experts could scarcely tell the imitation from the real article. It was doubtless owing to their high character that margarine and butter mixtures figured so prominently as a substitute for fine butter. An obstacle in the way of an even larger sale was public prejudice, which had not abated in any degree, and might only be got over by the wholesale merchants and retail dealers educating their customers on the matter.

We have never met with a more unblushing apology for the sophistication of food than this lecture, and we hope for the sake of the reputation of Mr. George Redpath, whoever he may be, that he has been misreported. We know of no other means yet adopted by retail traders for "educating" their customers into the use of spurious butter except by selling the adulterated stuff as genuine, and we have yet to learn that margarine and butter mixtures have a "high character," except with adulterating factors.

MORE ABOUT NORWICH.

We last week commented on the revival of interest among Norwich people in their food supply. Another correspondent of the *Eastern Daily Press* has since made the following pertinent remarks about the milk supply:

I am unable to explain the reason why there is such a disparity between milk sold in villages and a large proportion of that sold in Norwich. The former is much richer, and therefore more nutritious. I estimate the consumption at two pints per head per week in this city, which represents the sum of £65,000 per annum expended for milk.

Perhaps the Norwich Town Council will explain why they take no samples of milk for analysis. Milk is surely as important as beer.

CHESHIRE COUNTY COUNCIL AND PURE FOOD!

The report of the Cheshire County Council shows that the members are now keenly alive to the vital importance to English industries of paying strict attention to the purity of food. The Somerset County Council sent a resolution *re* labelling of foreign cheese as such, and the Monmouthshire County Council asked co-operation in a bill to give justices absolute power to refuse to grant grocers' licenses, and that such licenses be discontinued.

Mr. John Meldrum was appointed Food and Drugs Inspector on the same terms and conditions as Mr. Timmis, *i.e.*, £175 per year and 6s. per night expenses when away from home. Our readers will be glad to hear that Dr. Francis Vacher has been appointed Medical Officer of Health for the county.

THE USELESSNESS OF MILK WARRANTIES.

Commenting on the prosecution of the Callow Park Milk Company at Hammersmith, for adulterating milk with 13 per cent. of added water, a correspondent says:—

This is another case that goes to prove that you are right in agitating in your valuable columns for an amendment of the Food and Drugs Adulteration Act. Here is a large firm selling a large quantity of milk and water in all parts of London with impunity—and what is worse, can go on selling it to the detriment of the public, but at the same time enormously profitable to some one. Surely, the time is not very distant when the offender will come within the clutches of the law. This is the second time within a year that the same defendant has been summoned, but the summons has been dismissed each time for the reason that he had a warranty with the milk.

GROCERS AND THE FOOD AND DRUGS ACT.

At a general meeting of the members of the Metropolitan Grocers' and Provision Dealers' Association held at Anderson's Hotel on the 15th ult., it was decided to try to bring about a rise in the price of sugar throughout the trade. It was resolved on the motion of the chairman, seconded by Mr. H. Clifford, "That this meeting feels that the time has come when an amendment to the Sale of Food and Drugs Act is urgently needed, and recommends a federation of grocers' associations to take the necessary steps to bring such a measure before Parliament without delay. It also earnestly solicits the support of all representatives for the metropolis." Another resolution, calling upon the Chancellor of the Exchequer to abolish the quarter per cent. tax on customed goods, was also adopted.

The annual meeting of the Birmingham and Midland Grocers' Protection and Benevolent Association was held on the 21st ult., at the Grocery Exchange, High-street. Alderman Barrow presided. The annual report showed that the association had made steady progress. The subscriptions for the past year amounted to £145 19s., and after providing for all payments on the protection fund account, there was an excess of income over expenditure of £28 6s. 8d. The benevolent fund now stood at £1,451 7s. During the year many members had availed themselves of the assistance of the association in settling matters of dispute in the trade. In most instances an amicable settlement had been effected without recourse to law proceedings. Alderman Barrow moved the adoption of the report, and in speaking of the adulteration of coffee with chicory, said that very often the small and ignorant shopkeepers were summoned and fined heavily for breaches of the Adulteration Act. It seemed to him that in most cases the right party to pay those costs was the wholesale dealer who sold the goods as genuine to the retailers. He had, too, been surprised to see reports in the newspapers as to the manufacture of coffee. It had been stated that date stones had been ground into coffee, that carrots had been used, and in fact that coffee berries could be made in such a manner as to deceive the most skilful. (Laughter.) He had been in the trade something like 50 years, and he had never heard of these ingenious methods being employed. The report was adopted, and Alderman Barrow was then re-elected president of the association for the ensuing year. The other officers were also appointed.

DR. STURTEVANT AND MILK.

Dr. E. Lewis Sturtevant, the director of the New York Agricultural Experimental Station, states that he has known the milk of each teat of the same cow to vary from 24 to 42 per cent. of cream, and one day the milk of a cow which usually only marked from 13 to 15 per cent. of cream gave distinct definition of 60 per cent. of cream. Thus some Jersey cows have yielded as much as three pounds of butter a day or more; thus some cows have a record of raising 100lb. of milk a day for several successive days. The director was enabled to commence studies upon the dairy with some phenomenal milk. On November 30th, however, four Jersey cows were received at the station, three of which were in milk. These cattle had been two days in a railway car, subject to the shakiness, to the exposure, and to the irregularities of travel. Milked on the morning of the 30th, a part of their journey only having been accomplished, the evening's milk was withdrawn upon their arrival at the station, and immediately taken to the laboratory for analysis. The figures of the analysis read:—

JERSEY MILK—FATIGUED AND HARASSED COWS.				
Specific gravity by weight 1022.60	Ash	..	..	.59
Per cent. of cream after 15 hours	Loss, &c.	..	..	.62
Fat 80.30	Total solids	..	..	18.73
Casein 10.50	Water .. .. .	..	..	81.27
Albumen 3.09				
Sugar .. .. . .70	Total	..	..	100.00
2.23				

The phenomenal character of this milk is evident from the great percentage of fat, and also becomes more pronounced when we consider that this result is not from the milk of a single cow, but from the mixed milk of three cows. After resting a day at the station, the specific gravity of the milk approached the normal figures, and toward the last of the month a complete analysis of the milk showed a reduction in the total solids to 14.54, of the fat to 5.40, and an increase of the sugar to 5.03 per cent. One of the cows at the station calved during the night of December 3, and the first milk of the morning was the colostrum subjected to analysis. The milk was orange yellow in colour, of acid reaction, and of specific gravity by weight 1063. Its analysis showed the following result:—

JERSEY MILK—COLOSTRUM.				
Fat 5.22	Loss, &c.	..	..	.21
Casein 7.87	Total solids	..	..	25.28
Albumen 7.87	Water .. .. .	..	..	74.72
Milk sugar 2.94				
Ash 1.23	Total	..	..	100.00

This colostrum coagulated into a solid mass by boiling, and has remained exposed to the air in the laboratory up to date without any indication of putrefaction.

PUBLIC ANALYSTS AND SOMERSET HOUSE.

The *Lancet* in its last issue says :—

"The proposal that there should be appointed a duly constituted chemical department of the Local Government Board, with which the public analyst, as branch officers, so to speak, of the Board, should be placed in direct relation, is one that merits consideration. It would certainly be an advantage if analysts could be officially apprised of the latest forms which adulteration is taking; they could be warned to look out for any special and novel kind of sophistication of which the Government officials in their capacity might become cognisant.

"The present system of reference in the case of analysis is not satisfactory. On this account there has been a good deal of friction lately between public analysts and the Somerset House officials in regard to the wording of certificates. The chemists at Somerset House have for some time been known to base their interpretation of results upon an abnormal minimum. This has been specially so in the case of milk. We have argued before in favour of the fixing of a standard in the Act which would once and for all settle this much disputed point. That standard should be fixed by a court of experts, who could sit from time to time to revise or modify, as necessity arose, any existing limit. There would then be no need to shift the work at present undertaken by the Somerset House chemists to a newly-created department as has been suggested. There is, indeed, no reason for so doing; for we do not doubt that the Government analysts are equal to the task of conducting analyses. In all cases under dispute we suggest that the Somerset House officials should be referred to for a confirmation of the analytical result, but not for the expression of opinion as to the extent of adulteration. The standard fixed by the court of experts, were it a clause in the Act, would then decide whether the article in question was or was not adulterated. In short, let the Act decide the extent of adulteration and let the analysis made by the public analyst be officially checked by the Somerset House authorities. The analysis of sour milk, be it remarked, cannot be regarded as satisfactory, and the samples obtained in duplicate should accordingly be examined at once whether they are suspected to be adulterated or not.

"These things being seriously considered, it is obviously most desirable that the present laws relating to adulteration, together with the unsatisfactory working of the Act as at present exists, should receive the early and earnest attention of our legislators. We have felt for some time, and have had evidence ourselves of the fact, that the Act has not been operating in the way it was intended to do. It has in many instances been reduced to a dead letter while in most districts, if not, indeed, in all, the number of samples taken for analyses has been totally inadequate if the suppression of adulteration is to be effected. With regard to analysts, they have done their work well, and it is satisfactory to note the steps they are taking to ensure the better qualification of officers of their order under the Act, upon the successful working of which the quality of our food supply largely depends."

The *Lancet's* suggestion would, we fear, be only a very small plaster for a very large sore. It admits that the present system of reference is unsatisfactory. That dissatisfaction is not one that the appointment of a council of experts such as the *Lancet* suggests would remove, inasmuch as the analyses of public analysts would be officially checked by the Somerset House authorities. The public analysts would not, we think, nor ought they, to be satisfied with such a solution, inasmuch as it would be no reform, and would still retain Somerset House chemists in a position for which the mass of the public analysts recognise they do not possess the requisite competence. Tinkering with the question is what the adoption of the *Lancet's* suggestion would lead to. The *British Medical Journal's* opinion shows a deeper knowledge and a juster appreciation of the reforms necessary for the protection of the public from fraud fostered by official incompetence.

The *British Medical Journal* says :—

A very serious protest has been made by the Society of Public Analysts against the course adopted by the officials of the chemical department at Somerset House in disputed cases under the Adulteration Acts. For a long time past it has been well known, not only to those specially interested in these matters, but even to the general public, that there has been considerable friction between public analysts and Somerset House, and this has now resulted in the sending of a formal letter of complaint, signed by 120 public analysts and analytical chemists, to Dr. James Bell, the Principal of the Inland Revenue Laboratory. The public analysts complain, and we think with justice, of the inconclusive and unsatisfactory certificates issued by the Somerset House officials upon samples submitted to them in so-called reference cases; and that these certificates, while misleading both to magistrates and to the public, are such as to allow of reflections being unjustifiably cast upon public analysts. We are bound to say that Dr. Bell's reply to it is lame and unsatisfactory. It does not in any way meet the points raised by the society, and we sympathise with them in their expression of regret that the Somerset House officials "adhere to a course of procedure which is opposed to the general opinion of public analysts," with which sentence, all the more severe from the moderation of its tone, the council of the Society of Public Analysts have terminated the correspondence.

The *Chemical Trade Journal*, February 25th, says :—

"To infer that public analysts are analysts whose profession is to champion the cause of the public in the anti-adulteration crusade which is now in progress, would be a very natural inference, and one which has become truer of late years than heretofore. Not only have public analysts adopted the cause of those who are working so energetically to expose adulteration in all its phases, but they have also recognised the claims of those who are to be prosecuted, through their instrumentality for selling adulterated goods, to be dealt with justly.

"The Society has also performed a public service in dealing with the question of the advisability of Somerset House acting as referee in cases where analysts differ as to the purity of certain comestibles. This question, which would ultimately become a burning one, has been in a smouldering state for some time, and it is as well that it should be dealt with before it kindles further."

The *Bradford Observer* of the 21st ult. says :—

The Society of Public Analysts continues to be far from satisfied with the position taken up by the Somerset House official analysts on the question of milk adulteration. The Somerset House analysts, as we explained the other day, adopt a lower standard of quality for milk than the Society of Analysts is prepared to approve, the plea of Somerset House being that milk varies greatly in quality, apart from adulteration by the addition of water; and that it would be unjust to the milk vendor to affirm that his milk was watered when in fact it might be pure, but of inferior quality. Food, Drugs, and Drink, a journal which represents the views of the Society of Analysts, maintains that the Somerset House officials, by adopting the lowest possible standard of quality, do an injustice to the purchasers and to the reputation of the public analysts. Without pronouncing an opinion on the technical issue as between Somerset House and the outside analysts, we may admit that there seems to be ample evidence of the unsatisfactory administration of the Adulteration Acts. The only serious hope of amendment must lie in the persevering action of a body like the Society of Analysts; for experience has shown clearly enough that the purchasing public cannot protect itself, and is not likely to agitate violently for amended administration so long as adulteration is managed with any reasonable degree of prudence.

At the meeting of the Woolwich Local Board of Health, on the 13th inst., it was resolved that where all samples of milk had been reported to be adulterated with 5 per cent. and upwards of water, the solicitor should proceed against the purveyor. The solicitor reported the result of the proceedings in the police-court, on Friday, and the discrepancy between the Board's analyst's certificate and the certificate of the Somerset House analyst. Mr. Stratton asked whether Somerset House was an authority on the analysis of milk, because there was such a difference between 20 per cent. of added water and pure milk. He said the man's business had been very seriously injured by the proceedings, and he (Mr. Stratton) would ask the solicitor whether he had not a cause of action against that board. Mr. Hughes: That is a matter for the plaintiff to get an opinion on. I shall keep my answer until then. Professor Smith said that there was such a difference between the certificates of Somerset House and his own that he had communicated with Dr. Bell, the Somerset House analyst, and he was of opinion that they had analysed different samples. He (Professor Smith) suggested that he should draw up a report on the matter for presentation to the Sanitary Committee. This suggestion was adopted.

We have blazoned the fame of the Somerset House department even to India. The *Madras Times*, January 27th, says :—

The analytical department of Somerset House, as a result probably of the public comments which have recently been made on its management, has already occupied the special attention of the Board of Inland Revenue in connection with the allegations that some of the analytical chemists in the employment of the Government are indirectly interested in the sales of food and drugs which form the subject of official investigation. We are told that the authorities have issued an order which will obviate the possible continuance of an anomaly of that kind. But there are other subjects to which the board might with advantage direct its attention, if the allegations which have been made in the columns of our contemporary are capable of proof. It is probably no breach of Somerset House regulations for a Government chemist to undertake private work, but the objections to the continuance of such a practice are manifest, and they are strengthened when we are informed that analyses have been undertaken by public officers at one-third of the fee charged by analysts who have to defray the expenses of their own laboratories!

China and Peru have not yet sent their exchanges, but we do not suppose that "sweating" is any more favourably regarded even in those distant places.

THE PURE BEER MOVEMENT.

A Bill to regulate and restrict the use of hop substitutes has been framed, and will be brought before Parliament this Session, by several of the members for agricultural constituencies. It provides that all brewers who use hop substitutes and sellers of beer in which they are used, shall put up a notice in a conspicuous place outside their premises with the words "Hop substitutes" used. It is a move in the right direction; but will no member of Parliament take up the question of the use of preservatives in beer?

ADULTERATED DRINKS IN PARIS.

The Paris correspondent of the *British Medical Journal* says:

The Commission which sat to inquire into the quality and purity of alcoholic drinks consumed by the Paris public, procured samples alike from the most luxurious and most squalid wine shops and restaurants in the various districts of the French capital. All the samples submitted to analysis were returned labelled "bad," "dangerous;" all were found to be imperfectly rectified. M. Héret, *pharmacien en chef* at the Trousseau Hospital, has analysed five samples: one sold in a well-known Boulevard café at 10d. for a very small liqueur glass is just at the limit of those unfit to be drunk; its coloration is due to caramel. Some cognac procured from a restaurant of the species "Bouillion" is prepared by mixing three-sixths of river water with pure cognac, and colouring with ethers and vegetable substances. M. Guillemet, member for the Vendée department, declares this one to be preferable to all others examined. The alcohol sold to the working classes in the dining rooms they habitually frequent are impure in the proportion of three-sixths, and likewise contain amylic acid. In the ill-famed haunts near the Place Maubert, hot, sharp alcoholic drinks are sold adulterated, and containing caramel, vegetable substances, and methylene. These are excessively dangerous, but not more so chemically than certain brandies sold at 7½d. and 10d. the glass in several first-class restaurants. M. Guillemet has laid before the Chamber of Deputies, in the name of the General Tax Commission, a report embodying these facts, and proposing to give to the State the monopoly and rectification of alcohols. M. Guillemet asserts that excellent brandy is made in France bearing trade marks greatly esteemed, but more than nine-tenths of the alcohol consumed in France is falsified and rendered deleterious by the retail vendors. M. Guillemet believes that State monopoly would enrich the budget by a million, and alcoholism, with all its terrible results, would disappear. French sanitarians have always urged that fermented drinks such as wine, beer, and cider, which they consider wholesome and useful drinks, to be freed from a tax, and in order to satisfy financial exigencies and protect the public health have proposed an increased tax on alcohol, which they class under the category "poison." Dr. Théophile Roussel proposed in 1892 this important reform in the Assemblée Nationale, and nearly carried it. The question has been constantly discussed at congresses and sanitary societies. M. Jules Rochard published an exhaustive article on the subject in the *Revue des Deux Mondes* (April 16th, 1886), and lectured on it at the Trocadero in 1889. The Chamber of Deputies has voted the non-taxation of *boissons hygiéniques*, but has not increased the tax on alcohol. The question will shortly come before the Senate. M. Jules Rochard, in the *Union Médicale*, urges that legislative measures should be taken against the falsification of these fermented drinks, especially with poisonous cheap alcohol mostly coming from Germany.

It would be an unmixed blessing were we to have a "commission into the extent to which adulteration is practised in drinks in England, but especially in London. It would quickly open the eyes of the public to the evil effect of the advice given to Government by the Somerset House chemical department.

THE KENT COUNTY COUNCIL DEMAND A MILK STANDARD.

At the last meeting of the Kent County Council, the Food and Drugs Committee, reported that during the quarter 217 samples had been analysed and 19 were found to be adulterated. In 11 cases certificates of adulteration were given and proceedings taken, and in nine of these convictions were obtained. The Committee drew attention to the observations made by the County Analyst in his report for the past quarter as to the difficulty experienced in ascertaining that milk had been artificially watered, and added that it would seem to be necessary for the adequate protection of the public against the purchase of bad milk that there should be established, by Act of Parliament, a fixed limit or standard, and that it should be enacted that all milk falling below such limit or standard should be deemed to be adulterated if sold as milk, and that the sale of such milk should only be permitted if the public receive notice that it contains more than the standard quantity of water. The Committee recommended the Council to pass a resolution in support of such an amendment of the law, and to cause the same to be communicated to the President of the Board of Trade. They also recommend the appointment of Supt. Lacy (Rochester), and Supt. Capps (Faversham) as inspectors under the Act.

The report was adopted, and Alderman Marsham moved that the following letter be sent to the President of the Board of Trade:—"That this Council begs to call the attention of the President of the Board of Trade to the enclosed report of the Kent County Analyst for the past quarter, and to point out the necessity that exists for the amendment of the Sale of Food and Drugs Act, 1875, by the establishment of a statutory limit or standard quantity of water permissible in milk, and by the imposition of penalties for the sale of all milk falling below such standard, except when such sale was accompanied by express notes of the quality."

Councillor Warring seconded, and the motion was carried.

THE SALE OF CONDENSED "SEPARATED" MILK.

The *British Medical Journal*, February 25th, says:—

We have already called attention to the dangerous frauds perpetrated by the vendors of so-called "condensed milk" made from milk practically devoid of fat, or very deficient in that most important of constituents, and elsewhere we report the results of further analyses of samples of some of these preparations on sale in the English market. The shameful manner in which it is often sought to deceive the public by artfully contrived labels will be apparent from this report upon cases wherein some kind of admission as to deficiency in fat is made on the label in such a way as to deceive, and with the obvious intention of protecting the vendors from proceedings under the Adulteration Acts. The effect often is to shield the sellers from prosecution by affording an apparently strong ground of defence, namely, that by using the word "skimmed" on the label in any way, a sufficient disclosure is made to a purchaser as to the nature of the article he or she is buying. Under the 8th Section of the principal Act, however, labelling does not afford immunity if the adulteration or abstraction is decided by the Bench to have been "fraudulently to increase the bulk or weight of the article," and there can be no question that the sale of a "condensed milk" deficient in fat to the extent of 80 or 90 per cent. constitutes an offence under the section referred to. The point has not hitherto been fought out in the special case of condensed separated milk, but it is to be hoped that it will be. Of course each case must be dealt with on its merits, and it is required by the 9th Section that adequate disclosure of the abstraction shall be made to a purchaser before completion of the purchase.

On the other hand, there have been several cases of the sale of condensed "separated" milk without any admission whatever on the labels; but successful prosecutions have to a great extent suppressed this form of the fraud; and some makers of the fictitious product have, in consequence, taken refuge in the expedients above alluded to. Early in January six persons were prosecuted at the instance of the Middlesex County Council for selling "condensed milk" deficient in fat to the extent of from 50 to 80 per cent., and in two cases fines of £10 and £3 were imposed, the defendants appealing. A case heard at the Ystrad Police-court on January 30th, and reported in Food, Drugs, and Drink, is of interest, especially in view of the evidence given by Dr. Williams, the medical officer for the county of Glamorgan. It appears that the Condensed Milk Company of Limerick were the makers of the substance, which the public analyst certified to be deficient in fat to the extent of 93 per cent. In cross-examination we are glad to see that Dr. Williams stated in the most positive manner that the abstraction "injuriously affected" the milk, that the article sold was not, as stated, "useful for all household purposes," and that it would be highly injurious to feed children upon it. Indeed, Dr. Williams's evidence as reported might serve as a model in such cases. He pointed out that the food was rendered less digestible by the abstraction of the fat, that such a form of milk could not, properly speaking, be regarded as a duly nutritious article, and that infants fed upon it in the way suggested would pine, become emaciated, and probably die.

These cases are not the first that have been taken. There have been several in London and in different parts of the country attended with more or less success, but it is to be hoped that this, like most other adulteration frauds, will be in the near future more vigorously attended to by public authorities.

ROTHERHITHE VESTRY AND INSANITARY HOUSES.

The London County Council have taken steps to bring the Rotherhithe Vestry to a sense of its duty. The facts of the case have not yet been published, and they are sufficiently remarkable to warrant a little space being devoted to their notice. If, with nearly 600 insanitary houses in their parish, the inhabitants do not in public meeting condemn their local rulers, the people of Rotherhithe must be of a particularly easy going order. As far back as the beginning of the year 1889 a report by Dr. Murphy and Mr. Cubitt Nichols was presented to Parliament, stating that it was "no exaggeration to say that the results of lax administration abounded in Rotherhithe, and especially in houses occupied by poor persons, and that there was a complete absence of any system which would ensure the remedy of unhealthy conditions on their becoming known to the Vestry." Various suggestions were made by Mr. Nichols and Dr. Murphy, but these do not appear to have had much attention from the Vestry. Dr. Young, one of the County Council's medical officers, made an inspection of the houses and reported the result early in the present month. Four houses, he found, had been closed, and in 10 others the Vestry had served notices upon the owners to execute repairs, while in 34 houses repairs of an incomplete character had been effected, and 26 houses were either unlet or Dr. Young failed to obtain admission.

The population of Rotherhithe is, according to the last census, 39,074, yet there is only one sanitary inspector (Mr. Edwards) who, however anxious to do his duty, is obviously over-weighted with work. The Local Government Board are to be asked to direct the Vestry to appoint more inspectors, and to carry out the works required at the insanitary houses in question. Until this is done, Rotherhithe seems an eminently suitable and likely place for the cholera to take possession of.

FOOD PROSECUTIONS.

MEAT.

On the 10th ult., Robert Peck, a butcher, of St. Peter-street, Mile-end, was summoned by the sanitary authority of St. Matthew, Bethnal-green, for exposing for sale a quantity of meat which was unsound, unwholesome, and unfit for the food of man. The sanitary inspector gave evidence that his attention having been called to a stall in the carriage-way at Cambridge-road, Mile-end, he went there and saw the defendant had exposed on the stall several pieces of beef and mutton (in all about a hundred weight), and that he was selling the beef in slices, weighing about $\frac{1}{2}$ lb. or $\frac{3}{4}$ lb., at 1d. or 1 $\frac{1}{2}$ d. a slice. The beef was "damp, sticky, faint in smell, and without a particle of fat." The condition of the whole lot was unwholesome, and he (the inspector) seized it, had it removed to the office of the medical department, where it was certified as unfit for human food, and afterwards on that certificate was condemned by the magistrate at that court. Mr. Millard, M.D., assistant to Dr. Bate, medical officer of health for the parish, said that he examined the meat and found it of very low quality and unwholesome, but he could not say whether or not it had suffered from disease, as the pleura and bones of the ribs had been removed. Dr. Bate corroborated, and said the removal of the pleura was a known trick with diseased animals. At the same time he could not say the animal in question had suffered from a wasting disease. It was most probable, as it was so poor as to be quite innutritious. The defendant, who had put several questions to the witnesses, said he thought he could show that the medical evidence was unsatisfactory, and that he had better have an adjournment. Mr. Bushby said the penalty was £50, and he would grant the defendant an adjournment.

At the police-court, Birmingham, Thomas Page, poulterer, Bloomsbury-street, was summoned for exposing for sale sixteen fowls which were unfit for human food, and also for having in his possession twenty-eight more fowls in a similar condition. It was shown that the fowls mentioned in the first charge, which were exposed for sale outside the shop, were in a putrid state, and that the others, which were in a room at the back of the shop, were even worse. The wholesale dealer who sold defendant the fowls said they were frozen Russian fowls, that he sold them at the rate of 5s. 6d. a dozen; that in selling them he picked out any that were bad, and that in this way he threw away about 1,000, out of those consigned. The magistrates said it was a very bad case, and they fined the defendant £5 and costs in one case, and £1 and costs in the other.

At the Guildhall, London, Ernest Jones, farmer, of Ramsey Fen, Hunts, was fined £20 for sending to the Central Meat Market four pieces of beef which were unfit for human food. Dr. W. Sedgwick Saunders said it was the carcase of an animal that had died from some acute disease. The meat was dark, wet, soddened, much congested, and emitted a faint odour. It was poisonous, as decomposition had set in. Defendant pleaded that he had been misled as to the quality of the meat by a local butcher.

At Retford, on the 13th, Mr. H. Burton, senior, was fined 5s. and costs for having on his premises the carcases of three sheep, which were unfit for human food. A journeyman butcher named Rushby said the carcases were his and were intended for pig's food.

ANALYSTS' REPORT.

The report of Mr. A. Wynter Blyth, public analyst for Marylebone for January, shows that for the whole month there were 11 samples of food and drugs collected for analysis, and that no prosecutions arose out of them. This magnificent total of samples is equal to 132 per annum, or less than one per thousand of the population. The neighbouring parish of Kensington collects 500 samples per annum.

FOOD INSPECTORS' REPORTS.

The Scutthall Local Board at its last meeting received the report of the Sanitary Inspector that samples of milk had been collected from various vendors during the past month, one of which had been certified by the public analyst to be adulterated with 10 per cent. of added water. It was resolved to take proceedings against the vendor referred to. On the motion of Mr. B. G. Hanson, seconded by Mr. Saunders, a vote of thanks was passed to Mr. Tidy for the manner in which he had performed his duties during the past year.

HOW IT IS DONE IN ILLINOIS.

They have milk inspection even in Aurora, Illinois. A milk ordinance has been passed by the council which puts the duty in the hands of the health department, and authorises the police to carry a bottle for the collection of samples of milk. The first time a dealer is caught adulterating his milk, he is warned to do so no more; the second time an analysis of his ware is published in the city papers, and if guilty of a third offence, he is prosecuted under the state law.

PATENT MEDICINES AND THE GROCERY TRADE.

The Secretary of the Federation of Grocers Associations has sent the following circular to the secretaries of the branch associations:—

"Dear Sir,—The General Purposes Committee of the Federation has supported the Metropolitan Association in the test action which has been brought to deal with this question, and I have now to inform your Association that by a judgment of the Divisional Court of the High Court of Justice, on February 10th, it has been decided that no person, not being a properly qualified chemist, can legally sell "poisons." I submit a list of those preparations which, so far as can be at present ascertained, have been labelled "poisons" and come within that decision, and which we therefore recommend should at once be withdrawn from sale. It is important that you should acquaint the members of your Association of this decision, and you should supply them with the list of articles herein printed. This should be done within the next seven days if possible.—Yours faithfully, Arthur J. Giles, secretary."

LIST OF ARTICLES BELIEVED TO BE LABELLED "POISON" BY THE PROPRIETORS.

Atkinson and Barker's Infants' Preservative.	James's Phosphor Paste.
Barton's Rat Poison.	Jeremie's Sedative.
Bateman's Drops.	Kay's Essence of Linseed.
Battle's Vermin Killer.	Leath and Ross's Neuraline.
Blackburn's Cough Elixir.	Mandall's Licoricine.
Bows' (Dr.) Liniment.	McCann's Mixture.
Bradley's Cherry Pectoral.	Norburn's Nerve Tincture.
Brompton's Cough Specific.	Powell's Balsam of Aniseed.
Browne's Chlorodyne.	Rankin's Head Ointment.
Chase's Beetle Poison.	Roth and Ringersen's Paste.
Crosby's Cough Elixir.	"Rough on Rats."
Court's Drops.	Simpson's Morphine Solution.
Eaton's Cough Syrup.	Smith's Dog Pills.
Fellow's Syrup Hypophosphites.	Squire's Grand Elixir.
Fenning's Stomach Mixture.	Steiner's Cyanide Paste.
Ferris' Anodyne Amyl Colloid.	Steiner's Vermin Killer.
Ferris' Nephenthe.	Stone's Muricidane.
Freeman's Chlorodyne Lozenges.	Summer's Cough Lozenges.
Gibson's Vermin Killer.	Teasdale's Chlorodyne.
Hunter's Syrup of Chloral.	Towle's Chlorodyne.
Hunter's Vermin Killer.	Tuna.
	Winslow's Syrup.

This, as far as the mass of the patent medicine trade is concerned, means that grocers must practically give up the sale of such articles. Preparations, however, such as Oxbridge's Lung Tonic, which are not included in the above list because they do not contain poisons, may be sold as heretofore by grocers without fear of prosecution or infringing the law in any way.

UNSTAMPED MEDICINES.

At the Mansion House, London, on the 27th ult., John Morgan Davy, chemist, 95, Bishopsgate-street, was summoned for selling corn paint without the Government duty stamp attached. It was stated that all articles for the cure of diseases or ailments of the human body were required, if sold for more than 6d., to bear 1 $\frac{1}{2}$ d. Government stamp. The defendant contended that corns did not come under these heads; but, after evidence had been heard, the Lord Mayor said that he must decide the case against him, but would only fine him 1s. on each summons in the case.

To the PUBLISHER,

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F. C. CALVERT & CO., Manchester,

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Food, Drugs and Drink, —THE—

PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, MARCH 11, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

GROCERS, WARRANTIES, AND STORES.

ALL who are concerned with the working of the Food and Drugs Acts admit and regret that their operation is often very unjust to the retail grocer, and most of all to the shopkeeper who contents himself with a legitimate live-and-let-live trade. We have over and over again pointed out that the retailer cannot be supposed to know the exact constituents of the innumerable articles he sells, and that the true thief—the wholesale dealer or manufacturer who makes the grocer a dupe—ought to be punished. We would, therefore, caution retail grocers

against the wiles of the "wholesale" M.P.'s and others who are so keen just at present upon the "warranty" question. The specious lie is advanced that the "warranty" will shield the grocer from injustice. A moment's calm reflection shows the absurdity of the plea. The warranty would only enable the grocer to escape a fine. He would still have cast upon him the stigma of prosecution, and suffer its odium and loss of business, whilst the wholesale dealer would get off scot free; for who ever heard of the person who gave a warranty being proceeded against? They are no friends to the grocers who argue in favour of warranties alone. Much more drastic legislation is required if the retailer is to be properly protected. Every retail grocer doing an honest business knows the damage done to the trade and the public by the colossal stores that unscrupulous adventurers have opened in every part of London, and the principal provincial towns. It is notorious that these sellers of the finest tea the world produces, and like lyingly advertised articles, sell scarce one honest unadulterated article. How is it, that whilst the hard-working owner of a single shop is prosecuted again and again for an act of which the manufacturer is really the guilty person, the big stores are let to pursue fraud without any hindrance whatever? A case that recently came before the St. James's, Westminster, Vestry answers our query, and shows grocers generally, the abominable methods by which thievery on a mammoth scale escapes punishment. Samples of butter were taken from the stores of a firm who sell American produce as English, and were found to contain over 20 per cent. of margarine, and the question of prosecuting the vendor came before the Vestry. The traders' method was startling and characteristic. He practically informed the Vestry that he would demand an appeal first to Somerset House, who do not understand how to analyse butter, and that should the magistrates refuse such an appeal he would reply for a mandamus to compel them to grant one; and that as the Somerset House analysis would be sure to differ from that of the St. James' analyst, he would fight the case from court to court, even if it cost him thousands of pounds. The Vestry had to face the expenditure of thousands of pounds of the ratepayers' money if they prosecuted. They gave way to bluster, and dropped the prosecution. This episode is full of meaning to every honest grocer in this country. The present Acts allow the deliberate perpetrator of fraud on a grand scale to set them at defiance; they shield stores, manufacturer, and wholesale dealer, and punish heavily the struggling owner of a single shop, who suffers opprobrium and loss of business through the knavery of the manufacturer. In the struggle for existence the stores crush out the individual, not by honest trading, but by methods such as these. A true appreciation of these facts would be the salvation of the grocery trade, and individual retailers would do well to aid the public analysts and inspectors in the endeavour to secure such an Act as will touch the monstrous and shameful evils to which we have referred.

FOOD INSPECTORS' REPORT.

The annual report of the Medical Officer of the Fulwood Local Board, in whose district the Fulwood (Preston) Barracks, where the 2nd Battalion East Yorkshire and the 12th Lancers are quartered, are situate, states that the doctor visited the barracks recently to inspect some meat, and found a fore-quarter of beef "covered with a thick layer of adherent purulent lymph, indicating recent pleurisy—most probably pleuro-pneumonia." The meat was soft and slobby, and congested, and was at once condemned. From some cause, of which the medical officer was not officially informed, the prosecution instituted against the purveyor of the meat was abandoned. Since the issue of the medical officer's report it has transpired that as the meat was not "exposed for sale" the board considered they had no "locus standi" in a prosecution; but the military authorities imposed something in the nature of a fine upon the purveyor by deducting £10 from his contract money.

ADULTERATION PROSECUTIONS.

MILK.

John Marshall, cowkeeper, Oughtibridge, was summoned before the stipendiary magistrates at the City Police-court, Sheffield, on the 2nd inst., for selling adulterated milk. The milk sample was purchased from him on the same Sunday morning a month ago in Bloor-street, and it contained 16 per cent. of added water. The defendant said that eight out of the twelve gallons of milk they sold that morning they bought, and he denied having put any water to it. Fined 20s., and 8s. 6d. costs.

At the Swansea Police-court, on 24th ult., John Rowe, a Hafod milk-vendor, and Richard Barnard, Carmarthen-road, were summoned for milk adulteration. Sergeant Nicholas, one of the analyst's inspectors, gave evidence of the purchase of milk from each of the defendants on January 25th. The analyst's certificate gave each of the samples as containing six per cent. of added water. Mr. Herbert Monger appeared to defend, and contended that the milk was sold as received from the dairy, and that when there was such a small percentage of added water it could not well be decided that it was not the fault of the cows. The Bench decided that in fixing the standard of pure milk the lowest standard of juice squeezed from healthy cows was taken, and therefore any more water discovered must have been added by someone outside the cow. Therefore the defendant Rowe was fined 10s. In regard to Barnard, it was proved that he had bought the very small quantity of milk he sold from Rowe just before, and therefore he could not be in fault. The summons against him was dismissed.

Lewis Smith, 66, George-street, Hove, was summoned at the Hove Petty Sessions, on the 27th ult., at the instance of Henry Brownings, for selling a pint of milk which was not of a nature and quality demanded, at Hove, on the 8th ult. Henry Brownings, the officer appointed under the Food and Drugs Act, deposed that on the 8th ult. he saw the defendant's servant in the street and asked for a pint of new milk. He paid the price of new milk for it and then divided the pint into three portions, telling the man he was going to submit the milk to the public analyst. The certificate given him by the analyst showed that the sample had been diluted with added water to an extent of not less than 20 per cent. Cross-examined: witness said defendant's milk had always been good up to that time. Defendant said he had been four years in Brighton, and his business had greatly increased during that time, which he thought a good test of the purity of his milk. He had now about 500 customers, and he could hardly get milk enough to supply them all. He had had lately to buy a considerable quantity of milk to supply all his customers. A fine of £1 was imposed, with 17s. 6d. costs, or in default one month's imprisonment.

At Walthamstow Petty Sessions on the 2nd inst., before Mr. E. Howard (Chairman), and Mr. W. B. Whittingham. John Cole, of Walthamstow, was summoned at the instance of the Walthamstow Local Board, for selling milk from which one-third of the cream had been abstracted. Mr. W. W. West, the sanitary inspector, proved the purchase, and produced the analyst's certificate. The Bench asked defendant what he had to say. Cole said that he milked the cows himself, and he knew the milk had not been tampered with. His wife had served from that pan from seven in the morning till eleven, and then he went into the shop, and the first customer he served was the inspector. There was not much milk left in the pan, and he had been told since by other milkmen that his wife had probably not stirred the milk as she served it, and had thereby taken more of the cream away than she should. He had taken the portion of milk left by the inspector to be analysed, and he produced the certificate. The Bench: "Why that supports the prosecution." "The analyst says it is partly skimmed." Have there been any previous convictions? Mr. West replied that defendant had been fined twice previously at that Court. The Bench: The offence is perhaps not quite so serious as the previous ones, but you have been long enough in the trade to know the business. You are fined £5, with costs.

At the same court, Leonard Jackson, also of Walthamstow, was summoned for selling milk which was not of the nature, substance, and quality demanded. Mr. G. Houghton, clerk to the board, appeared for the prosecution, and Mr. Moore defended. Mr. Moore, on the case being called, said he took a preliminary objection to the form of the summons, as not complying with the terms of the Act of Parliament by stating particulars of the offence. He contended that the mere quoting the words of the section was not sufficient, but the particular offence, such as the addition of water, must be set out. The Bench said the point would be noted, and the case had better be heard. The case was proved by Mr. West and his assistant, and the certificate of the analyst produced that the milk contained at least 15 per cent. of added water. Mr. Moore objected that the purchaser had not offered to divide the sample. He had divided it and given the lad a portion, but there was no evidence that division was offered. A distinct offer to divide must be made, or how could a seller refuse. A division without his actual consent was not in accordance with the Act. The Bench: Our clerk has it on his notes that the purchaser offered to divide? Mr. Moore: "No, sir. I paid special attention to the evidence, and I believe that was not said." Mr. Houghton: "I am content if your worships have a note that a portion was accepted and taken away by the seller." The case was then adjourned for consideration of Mr. Moore's preliminary objection.

At the Liverpool Police-court, on the 1st inst., Daniel Davies, Wrayburn-street, was fined 40s. and costs, for selling milk adulterated with 13 per cent. of water.

Alice Scholes, Ashfield-street, for selling milk adulterated with 5 per cent. of water, was ordered to pay 10s. and costs.

At Merthyr Police-court, on the 25th ult. (before Mr. W. M. North, stipendiary, and Mr. W. Smyth), David James, Troedyrhiw, was summoned by Superintendent Thorne, under Section 6 of the Food and Drugs Act, for selling milk not of the nature, substance, and quality demanded by the purchaser. The certificate of Dr. Morgan, the county analyst, showed that the sample analysed by him contained 10 per cent. of skim milk and 5 per cent. of water. Mr. W. Beddoe, who defended, argued, upon the authority of the case of Lane v. Collins, which he claimed to be on all fours with this, that no offence had been committed under Section 6. The stipendiary pointed out that the two cases were not parallel. Mr. Smyth said that very wet weather, such as had recently been experienced, would affect milk to a certain extent, for if cows were out in wet weather the milk would be much more watery than it would be if the weather were dry. The stipendiary observed that there was a good deal in what his colleague had said. On the hearing of a case at Aberdare some time ago he was told by a gentleman of great experience in agricultural matters that, in relation to the quality of milk which they yielded, cows were very considerably affected by rain. So far as the deficiency of butter fat was concerned, he thought Mr. Beddoe's argument would apply. Mr. Beddoe then proceeded to contend that, as to the water, the defendant, if liable at all, was liable under Section 9. The stipendiary, in giving judgment, said that with regard to the skim milk the bench would follow the ruling in the case of Lane v. Collins. In reference to the water, as it was allowed by the Somerset House officials that 7½ per cent. of water might be found in milk drawn from the cow, he did not think they could inflict any punishment in respect of the presence of only 5 per cent., consequently the summons would be dismissed.

George Hearnshaw, aged 16, of Daniel Hill-street, who came with his mother, was summoned before the Stipendiary Magistrate at the City Police-court, Sheffield, on the 2nd inst., for selling adulterated milk. The inspector purchased some skim milk of him, and on analysis it was found to contain 10 per cent. of added water. Mr. Sayer said he understood the boy was selling the milk for his uncle, George Hearnshaw, farmer, of Bradfield. Mrs. Hearnshaw denied having tampered with the milk. All that she did was to dissolve a little saltpetre in half a teacup of water and put it in the milk to take from it the taste of turnips, which some people did not like. The cows had turnips three times a day, and "turnips make a deal of water, as you yourself know," said Mrs. Hearnshaw, appealing to the Court. The Stipendiary: Yes; there is something in that. Mr. Sayer submitted that such an excuse could not be accepted. All cows were more or less fed on turnips at this period of the year. The defendant should have given notice, and Mr. Allen would have been present and explained the matter. It was utterly impossible for 10 per cent. of water to have got into the milk as the result of the cows having been fed on turnips. The Stipendiary said there was every appearance of water having been used, and the defendant would be fined 15s. and costs.

Margaret Jones, of New-park Farm, Castle-fields, was charged on the 2nd inst. at the Mayor's Court, Shrewsbury, with selling milk which was deficient in fat; and Dr. Hill, the analyst for Shrewsbury, being called, gave the result of his analysis. After the hearing of witnesses for the defence to prove that the milk had not been tampered with, but sold as it came from the cows, Dr. Hill was recalled, and he stated that if milk was left standing in a tin for a time the cream would naturally rise to the surface, and milk drawn from a tap at the bottom of the tin would be deficient in fat. Many of the large salesmen were introducing a contrivance to remedy this. The case was dismissed.

At the Workop Police-court on the 1st inst., John Spencer, milk dealer, Abbey-street, Workop, was charged by Inspector Garforth under the Food and Drugs Act, with selling milk on January 16th last, which was not of the quality it should have been. The inspector said the milk was found to contain 6 per cent. of water. In reply to the charge, defendant said his cows had gone dry, and he had been buying milk from other persons, and his daughter had only just come away from the place where she got the milk. The milk had never been in his house at all. The Bench told him that it was his duty to see that the milk was good. Defendant complained that his child had been taken into a public-house while the milk was taken. Fined 10s., to include costs.

Gideon Billingham, chain manufacturer, Granger's-lane, Cradley Heath, was summoned under the Food and Drugs Act, at the Old-hill Police-court, on 28th ult., for selling milk not of the nature and substance demanded. Mr. Morris (Food and Drugs inspector) appeared in support of the summons, and Mr. Waldron defended. Samuel Toy (assistant inspector) said on Sunday, January 22nd, he and two assistants took samples of milk at Five Ways, Cradley Heath. One was from a young woman named Beard, who said she was selling milk for defendant, who kept cows. He purchased half-a-pint from the girl. Mr. Morris said that he received two samples of milk from the last witness. The County Analyst certified that the milk contained 42 per cent. of added water. Mr. Waldron said defendant was a very respectable and honest man. He contended that the girl was not informed that the milk was purchased by Toy for the purpose of analysis. They had had it analysed, and found it contained 37 per cent. of added water, which his client could not account for. It was quite possible that Toy might have sent one of the other samples he had taken in mistake for that of Mr. Billingham. Gideon Nelson Billingham, defendant's son, Kate Billingham (wife), Sarah Jane Beard, who sold the milk, and Mrs. Price, who bought some milk, gave evidence to the effect that no water was added by any one of them. The magistrates considered the case proved, and imposed a fine of £5 and costs.

At the Derby Police-court, on the 23rd ult., Charles Finney was summoned for selling to Mr. William Wilkinson, the inspector under the Food and Drugs Act, a pennyworth of adulterated milk. Mr. William Wilkinson said that on January 27th he purchased the milk from a man named Samuel Bull, who was delivering it at Messrs. Weald's dairy on the Siddals-road, for the defendant. The sample was submitted to Mr. Otto Hehner, the borough analyst, who found that it contained 94 parts of milk and six parts of added water. In answer to Mr. Stone, who represented the defendant, the witness said that another sample only contained 4 per cent. of added water, and no proceedings had been taken with regard to it. He also stated that the sample was taken after the milk had been delivered on the floor of the dairy. Mr. Stone, for the defence, said that the milk was sent to the dairy in Derby in churns by four farmers from Mickleover, in a cart belonging to one of them. The milk had been delivered on to the dairy floor, and therefore he argued that the proper person to be summoned was the owner of the dairy. He also pointed out that the milk was sold a long time previously by contract, and therefore Bull, who was really the servant of a Mr. Storer, had no right whatever to sell any of the milk. Mr. Stone also commented upon the smallness of the percentage of adulteration. The Bench, after considering in private, over-ruled the technical objection raised by Mr. Stone, and fined the defendant 1s. and costs. Mr. Stone then asked the Bench to state a case for the higher court, which the magistrates consented to do.

Before the Stipendiary Magistrate at the City Police-court, Sheshield, on the 2nd inst., Charlotte Aston, wife of John Aston, cowkeeper, 87, Harold-street, was summoned under the Sale of Food and Drugs Act, 1875, with having sold to John Gibson, an inspector of nuisances, a sample of milk which was not of the nature, substance, and quality demanded by the purchaser. The milk was adulterated to the extent of 20 per cent. of added water, and it was also deprived of its natural cream. Mr. Allen, the city analyst, certified to that fact. The case was one of three which had to come before the Court, and they all related to samples which were taken on one Sunday morning in the Walkley district. Gibson went in the usual course of his duties and took samples from the first half-dozen milk sellers that he met. Two of the samples were of suspiciously poor quality, but not sufficiently bad to be condemned; one sample was pronounced pure; and the sellers of the other three samples had been summoned. The Stipendiary: All different people? Mr. Sayer: All different people. They were taken haphazard, and practically all in Bloor-street. The medical officer regarded the adulteration to the extent of 20 per cent. as a very serious adulteration, as it handicapped the honest tradesman most gravely. The vendor of the adulterated milk was able to dispense with one cow in five. He could carry on his business with four cows, where the honest man required five. Inspector Gibson gave evidence in support of this statement. Mr. Aston, who appeared for his wife, said the greater part of the milk they sold on the Sunday morning was milk they had bought. The Stipendiary: You are responsible if you sell it. Mr. Aston: We bought it about a quarter of an hour before we served it, and we had to take the responsibility of other folks' milk. The Stipendiary said he should have taken a guarantee with the milk, and fined him 40s., and 7s. costs.

On the 2nd inst., at the Mayor's Court, Shrewsbury, Thomas Meredith, a milkman, who lives at Arscott, was charged with selling a pint of milk which was deficient in natural fat to the extent of 27 per cent. The Town Clerk (Mr. H. C. Clarke) appeared to prosecute. Police-constable Binnall, the inspector under the Act, deposed to purchasing the milk, which he divided into three parts, one of which he sent to Dr. Bostock Hill, of Birmingham, the analyst for Shrewsbury. Dr. Hill's certificate showed that the milk was deficient in fat as alleged. The defendant asserted that unknown to him a servant had, in mistake, mixed some skim milk with the fresh. A fine of £5, including costs, was inflicted.

At the Brentford Petty Sessions, on 25th ult., before General Tremenhare (in the chair) and other magistrates, George White, of Windmill-road, Brentford, was summoned for having sold milk adulterated with 5 per cent. of added water. Mr. T. A. Woodbridge defended, and denied, on defendant's behalf, that the milk was adulterated. After formal evidence had been given by Inspector Tyler and his assistant, Mr. Bevan, the county analyst, was called. In reply to questions, he said that different breeds of cows gave different qualities of milks. The analysis was judged from a standard taken from the worst possible cow. The magistrates fined defendant 20s., with 10s. 6d. costs.

Ellen Sheate, of 176, High-street, Brentford, was summoned for having sold milk adulterated to the extent of 6 per cent. with added water. Mr. Reckitts defended. Inspector Tyler said that two samples of milk sold by the defendant were taken on the same day, one in the street and one from the shop. The sample taken in the shop was unadulterated. He had taken samples from the defendant's premises every quarter, and none previously had been adulterated. Mr. Reckitts produced a warranty of the genuineness of the milk from the wholesale firm with whom the defendant dealt. The magistrates ordered the defendant to pay the costs.

At Salford Borough Court, on 24th ult., John Hill West, outdoor beerseller and provision dealer, Tully-street, Higher Broughton, was fined 20s. and costs for selling milk adulterated with water. Joseph Wilson, who keeps a small shop in Queen-street, for a similar offence was fined 10s. 6d. and costs. Susanna Parr, outdoor beerseller, Gloucester-street, was fined 2s. 6d. and costs for selling milk containing 12 per cent. of added water. Levi Jones, dairyman, Greengate, was also fined 10s. 6d. for a similar offence. Mr. A. Holmes, deputy town clerk, prosecuted, and the cases were proved by Inspector Rider.

Messrs. E. Croxford and E. Wyatt, the Butts, Brentford, were summoned for having sold milk adulterated to the extent of five per cent. with added water. Mr. Reckitts defended and produced a warranty. Defendant was ordered to pay the costs.

George Lookley, of 315, High-street, was summoned for having sold milk adulterated with 40 per cent. of the fat abstracted therefrom. Defendant said he was laid up at the time that the sample was taken. He mostly sold separated milk at 2d. per quart, and but little new milk. He thought that on this occasion the boy must have taken the milk from the wrong can. The Bench fined the defendant 20s., with 10s. 6d. costs.

At the Thames Police-court, on Thursday, 23rd ult., Mary Ann Taylor, of 18, Old Gravel-lane, St. George's, was summoned at the instance of the St. George's Vestry, for selling milk adulterated to the extent of 17 per cent. of water. Mr. George Hay Young prosecuted, and defendant did not appear. It was stated that after the inspector purchased the milk, defendant tried to take the jug out of his hand. Mr. Dickinson fined defendant 20s., and 23s. costs.

At Carmarthen Police-court, on the 20th ult., William Lewis was charged with selling adulterated milk. Superintendent Thomas Smith sworn, said: I am chief constable of the Carmarthenshire Borough Police. On the 3rd inst., between 8 and 9 a.m., I purchased a pint of milk off the wife of the defendant in Quay-street, for which I paid twopenny. I told her that I was taking it for the purpose of having it analysed, and in her presence I divided the pint into three parts, corked and sealed the bottles with the Corporation seal, gave her one bottle, kept one myself, and sent the other to the public analyst. I produce the certificate of the public analyst, Mr. William Morgan. (The certificate put in was to the effect that the sample analysed contained 7 per cent. of added water.) Mrs. Lewis, when I told her the milk was for analysis, said, "It is all right," or words to that effect. I told her before the milk was delivered to me that the milk was meant for analysis. The milk was sent by parcel post, not registered. It was a fine morning. Harriet Lewis sworn, said: I am the wife of the defendant. On the 3rd February I milked two cows soon after seven in the morning. I milked into a tin jug, which was empty. I strained the milk into another empty tin jug, and I sold the milk from that jug to Mr. Smith. I put no water or anything else into the milk. The milk was never out of my sight from the time I milked the cows till I sold the milk. During the winter I kept the cows in the house. They were out for a fortnight before the 3rd of February, and had been feeding on grass and hay. They had been having barley meal while they were in the house. The case was dismissed.

BUTTER AND MARGARINE.

On the 27th ult., the Tunbridge Wells magistrates were engaged several hours in hearing a summons for selling adulterated butter against James Wheeler, of the Calverley-road Co-operative Grocery Stores, and of East London, who was convicted under the Food and Drugs' Act of selling to a customer as pure butter some "mixed" butter in a genuine butter wrapper, an analysis showing that the "mixed" butter was a substance known as margarine. He was fined £10, and £4 1s. costs. Defendant urged that one of the assistants had served the article, but the Bench pointed out that unless protected, poor people would be at the mercy of dealers who supplied adulterated articles.

At Bow-street Police-court, on the 2nd inst., James Hutchinson, coffee-house keeper, Essex-street, Strand, was charged with selling butter which was adulterated with 50 per cent. of margarine. Mr. Strutt, an inspector in the employment of the Strand Board of Works, entered the coffee-house and ordered a meal, including butter, which he took away for analysis, with the result stated. Sir John Bridge fined the delinquent, who said he was unaware of the adulteration, £3 and costs, remarking that it was very hard for workmen to be served with stuff like that when they paid for real butter.

At Tunbridge Wells Petty Sessions, on the 28th ult., under the Adulteration of Food Act, Jane Wheeler, provision dealer, was summoned for selling adulterated provision to the public at the shop 44, Calverley-road, Tunbridge Wells, on the 13th of January. For the complainant, Mr. Beck contended that the question was one of serious import, and of considerable interest to the public as customers. The offence was a serious one. Kate Gardener said that on the 14th of January she went to the Co-operative Stores, No. 44, Calverley-road, Tunbridge Wells, and asked for half-a-pound of shilling butter. Witness was served with this and paid 6d. for it. She had been told by her father to ask for shilling butter. She had nothing to indicate that she was not receiving pure butter. A certificate of analysis was put in showing the article sold to be margarine. For the defence Mr. Rickett maintained that some interested persons of the society were at the bottom of the prosecution to prevent the sale of "margarine" in England. Miss Gardener, who bought the article, must have known that she could not get butter pure at one shilling per pound. Only a very rancid, a very unpalatable mixed butter could be sold at 1s. per pound in January. The sale of margarine was a great boon to the poor in winter, as no English butter could be sold at 1s. per pound. The Bench reminded Mr. Rickett that Miss Gardener had not asked for "English butter," but for "1s. butter." James Wheeler, the proprietor of the Calverley-road Co-operative Stores, Tunbridge Wells, admitted that he had been a defendant in a like case at Wandsworth, and once also at Tunbridge Wells. He had shops at High-street, Putney, and at North-end, Bow, London, and the same system of business was in vogue at all the shops. Robert Gravham, one of the shop assistants at the Calverley-road Stores, deposed that Miss Gardener must have seen the tickets in the shop window marked "mixture" when she bought the article, and

if the margarine got into a "butter" paper it was an accident. He asked Miss Gardner whether she wanted "pure butter or mixture," and she took the mixture knowing it to be such, and she could also see the words "margarine" posted up in the shop. Charles Jarvis, one of the assistants at the Tunbridge Wells shop, said that Grayham, at the time of the purchase alluded to, had appealed to him as to whether Miss Gardner had or had not asked for the mixture butter, and he (Jarvis) replied that she asked for the mixture. The Bench said it was a very bad case, as people with small means became sufferers in having such food sold to them. Defendant would have the displeasure of the Bench marked by a fine of £10, and £4 8s. costs. Mr. Rickett intimated that probably defendant would appeal.

At Belfast Police-court, David M'Master, inspector of foods, summoned John Dempster, 208, Newtownards-road, for having sold, on the 28th January last, a quantity of butter, same not having been of the substance and quality demanded by the purchaser, and contrary to the statute. Mr. John M'Cormick appeared for the defendant. The sample, which had been analysed by Professor Hodges, was found to be margarine, and not genuine butter. The defendant was fined £3 and costs.

At Wolverhampton, on the 3rd inst., Isaac Turner, an old man, of George-street, New Village, was charged with selling adulterated butter. On three-quarters of a pound of butter being purchased for 10½d. from the defendant's shop, it was found to contain 73 per cent. of margarine. Defendant's wife attended the court, and said he bought the substance as genuine butter from a grocer in the neighbourhood. A fine of 27s. 6d., including costs, was imposed. The proceedings were instituted by Mr. J. E. Morris, county inspector under the Food and Drugs Act.

Before Sheriff Birnie at Glasgow, on the 22nd ult., John M'Laughlan, provision merchant, 72, Stevenson-street, was charged with having on 10th January, in his shop, sold margarine by retail without delivering the same to the purchaser in a paper wrapper having printed thereon in capital letters, not less than a quarter of an inch square the word "Margarine." Mr. John Lindsay, clerk of police, prosecuted, and Mr. Daniel Alexander, appeared for defender, who pleaded not guilty. The point raised in the case is a very novel one. Defender used wrappers with the necessary word printed as the Act directs, but there were also printed on the wrapper over a dozen other words, so that according to the contention of the Sanitary Authorities, the purchasers were misled, and there was no distinct intimation that what they were getting was margarine. The defender on the other hand maintains that he has literally complied with the Act of Parliament. The case on the motion of Mr. Lindsay was continued till the following day, when Sheriff Birnie gave judgment. He said that he had no doubt that a wrapper might be made in fraud of the Act, but after consultation with some of his brother sheriffs, he had come to the conclusion that he could not say that this wrapper was so. He therefore assolized the respondent. Mr. John Lindsey who appeared for the prosecution: In respect to the vast importance of the case to the community, I ask your lordship to state a case for appeal to the High Court.

At Glasgow, on the 3rd inst., before Sheriff Birnie, Lawrence Wall, provision merchant, 42, Rose-street, South-side, was fined 35s. for having, on 2nd February, exposed margarine for sale without it being labelled, and also with having sold to a sanitary inspector a quantity of margarine which was not contained in a proper wrapper. George Brown, 135, Bridgegate, for a similar contravention, was also fined 25s.

Walter William Anderson, 62, North Woodside-road, was charged with having on 1st February exposed margarine for sale which was not properly labelled. He pleaded not guilty, and stated, supported by his shopman, that while a kit of margarine was being removed from the window, during the operation of cleaning, the label fell off, and was not discovered till after the sanitary inspector had left, when it was got amongst some papers beneath the window. The Sheriff found the charge proved, and imposed a fine of 35s.

At the Liverpool County Magistrates Court, on the 25th ult., Ernest Albrecht, cocoa-room proprietor, 132, County-road, Walton, was summoned under the Food and Drugs Acts for selling an article not of the nature, etc., demanded. A sergeant of police went in plain clothes to the defendant's rooms and asked for two cups of coffee and four pieces of bread and butter. He told defendant he purchased the food for the purpose of having it analysed, and offered to divide it, but defendant declined the offer and said it was all right. The butter upon being analysed was found to contain 30 per cent. of fat other than butter. Mr. Perkins (to defendant): Have you anything to say to that? Defendant (who spoke with a strong foreign accent): It was just as I received it from the grocer. Mr. Perkins: Did you buy butter of margarine? Defendant: Butter, and paid 1s. 3d. a pound for it. Mr. Perkins: You have no redress against the person you bought it from. Defendant: My wife has been complaining of it before, but paid 1s. 3d. a pound. Mr. Perkins: Still you are responsible. If you buy a thing and sell it you are responsible if the article is not what you profess to sell it as. Defendant was ordered to pay the analyst's fee. Defendant: It is a shame to have to pay that after paying 1s. 3d. a pound for butter.

LARD.

At the Cardiff Police-court, on the 24th ult., Sidney Frank Pearce, 12, Carlisle-street, was summoned for having, on the 23rd of January, sold a bundle of adulterated lard. Defendant admitted the offence, but pleaded in extenuation, that the article was sold as lardine, but the boy who sold it omitted to tell the purchaser so. In

reply to the Stipendiary, defendant admitted that the article was not labelled lardine. Fined £3 and costs, or a month's imprisonment in default.

At the Tynemouth County Petty Sessions, on the 27th ult., John Robert Greenwell, grocer, carrying on business at Wallsend, was summoned for selling to Superintendent Taylor 1 lb. of lard, which was not of the nature, substance, and quality demanded. Mr. A. Whitehorn prosecuted, on behalf of the police, and Mr. T. Gee defended. Superintendent Taylor said that on the 25th ult. he went into the defendant's shop, at Wallsend, and, entering a back room, saw a lad putting up pound packages of some article. He asked the lad what he was putting up, and he said "lard." He bought a pound of it, and paid 6d. Afterwards the manager came in, and told the assistant that he should not have sold the article for lard, as it was "lardine." Witness put in the certificate of the public analyst, which showed that the article contained about 80 per cent. of cotton seed oil and beef stearine. Mr. Gee, for the defence, said that the article was not sold as lard, but as "lardine." Robert Souter, the assistant, was called, and said he remembered the superintendent coming through the shop into the warehouse. It was not usual to serve customers in the warehouse, but, knowing the superintendent, he served him there. He sold the article as lardine; the price of lard was 7½d. per lb. The shop boy also said the assistant sold the article as lardine. The pail from which the article was being put up was labelled "lardine." Philip Nugent, the manager, said he had a conversation with Supt. Taylor, and told him if it was sold as "lard" it was a mistake on the part of the assistant. He was not present when the sale took place. The defendant, who affirmed, also gave evidence, and said the price of lard on the date named was 7½d. per lb. He had samples of seven different kinds of articles analysed a week previously, and all were passed as pure. In reply to the Bench, he said he had no bills showing that it was "lardine." The Act of Parliament made it imperative that, in the case of margarine, the letters should be of a certain size, but there was no mention of lardine. The magistrates, after consulting in private, said they thought the compound had really been sold as lard, and the defendant would be fined £1 and costs.

At the South Shields Petty Sessions, on the 28th ult., before Alderman Browell, Colonel Allison, Mr. Briggs, and Mr. Dale, George Carlton Bainbridge, grocer, West Boldon, was charged with selling, on the 11th ult., half a pound of lard, which was not of the quality and substance asked for, being adulterated with 10 per cent. of beef stearine. Mr. Hood, who defended, admitted the offence, but explained that the fat, which was not a deleterious compound, had been used by the refiner to make the lard a marketable commodity. A fine of 10s. and costs was imposed.

COFFEE.

At Swansea County Police-court, on the 1st inst., Messrs. Evan Hopkins and Co., Pentardulais, were summoned under the Food and Drugs Act for selling adulterated coffee on the 3rd ult. Mr. Rees Edmunds, of Cardiff, defended. Inspector Gittings spoke to making the purchase, and added that he saw an assistant in the shop, who told him that he had not any coffee except dandelion, and asked if that would do. Witness said "Yes," and then he purchased a tin. According to the analyst's certificate this contained 27.5 per cent. of pure coffee, and 72.5 per cent. of chicory. In defence, Mr. Edmunds said the inspector received what he expressed his willingness to take. The Bench: What is dandelion coffee? Mr. Edmunds: Dandelion and coffee; but that point has been settled. The Clerk: And he has not got it; according to the certificate he has got coffee and chicory. The Bench eventually adjourned the case for a fortnight to secure the attendance of the analyst.

At Lambeth, on the 3rd inst., Mr. H. T. Stubbs, of 225, Clapham-road, grocer, was summoned by Mr. H. T. Wiggs, on behalf of the Lambeth Vestry, for selling coffee containing chicory to the extent of 60 per cent. There was a second summons against the defendant for selling cocoa containing 66 per cent. of a lard starch and sugar. The sale of the article was admitted, but Mr. Hood, solicitor, who appeared for the defence, took objection to one of the analyst's certificates on the ground that it was not addressed to the person who caused the analysis to be made, and that it was dated the 31st of Dec., 1893. Mr. Eyron overruled the objection, and ordered the defendant to pay a fine of 40s. and 12s. 6d. costs on each summons.

COCOA.

At the Clerkenwell Police-court, on 1st inst., before Mr. Horace Smith, Charles William Davis, grocer, of 12, Westbourne-road, Barnsbury, was summoned by William West, sanitary inspector in the employ of the Islington Vestry, for selling a quarter of a pound of cocoa, which was found, when analysed, to be adulterated with an addition of 40 per cent. of sugar, and 15 per cent. of starch. The case came on for hearing last week, and was adjourned in order that defendant might call his wife, she having sold the cocoa to the inspector. Mrs. Ellen Odams now gave evidence, and stated that she was not in the habit of serving in the shop. In fact, the inspector was the first person she had ever served. He asked for cocoa, and she said, "What kind do you require?" He replied, "I want loose cocoa," and she supplied "Fry's Chocolate Essence," that being the only loose cocoa in the shop. She charged him 3d. for the quarter of a pound. The inspector must have seen the words "Chocolate Powder" on the tin. In reply to the Magistrate, the inspector said defendant's shop was a small one. Mr. Horace Smith inflicted a fine of 10s. and costs.

At the Ashford Police-court on the 24th ult., George Lauder, of New-street, Ashford, was summoned for selling adulterated cocoa. P.C. White, of Brabourne, called at the shop on the 23rd ult., and asked for several articles, including one pound of loose cocoa. He was served by Mr. Lauder's son, who, when he was told that the goods were for analysis, said he had forgotten to put the label on the cocoa, and asked to be allowed to do it then, but permission was refused. When the goods were analysed all were found to be pure except the cocoa, and this, the analyst stated, according to the certificate handed in by Mr. Superintendent Wenham, contained 50 parts cocoa and 50 parts starch and sugar. Mr. Lauder pleaded guilty, saying his son had neglected to put on the label stating that other ingredients were included. Messrs. Fry and Sons supplied these labels with the mixture. Mr. Sayer said people who asked for the genuine article ought to be supplied with it, even if it cost more, and Mr. Lauder said if they asked for it they would have it. Pure cocoa cost 2s. or 3s. a pound, and this was sold at 6d. The Chairman said the object of the laws with regard to adulteration was chiefly to protect poor people who went and purchased what was given to them, perhaps not knowing but what a lot of cocoa nibs might have come in cheap. It was the duty of persons selling these cheap articles to explain to their customers before they bought them that they were not pure. As the other articles were pure, the fine would not be anything like so heavy as it might be, the maximum being £20. There would be a fine of £3 and 12s. costs. Mr. Lauder: Can't I appeal against that? It seems to me perfectly outrageous. Mr. Creery: You had better have advice, Mr. Lauder.

OATMEAL.

At Barnard Castle on the 22nd ult., Charles Raine, of Bridgegate, grocer, was charged with selling oatmeal containing 20 per cent. of barley meal. Mr. Baringham for the defence, explained that defendant bought all his oats at Penrith. The bags came to Barnard Castle and were conveyed direct to Deepdale-mill and ground there, and then delivered at defendant's place of business ready for sale. Defendant sworn, proved all this, adding that he had never sold barley meal. His family had sold oatmeal for sixty years without complaint. West-country oats were bought because they were the best. He had sold large quantities to Mr. Thompson (superintendent). Parkinson, jun., of Deepdale-mill, gave evidence how the grain was dealt with. The Bench pointed out that the defence had admitted a per-centage of adulteration, and defendant was further fined 20s.

MEAT.

On the 26th ult., at Coventry, Councillor William Bates Judkins, pork butcher, 24, Smithford-street, was summoned for having on his premises, prepared for the food of man, a carcase of beef not fit for human consumption. Mr. Beard, assistant town clerk prosecuted, and Mr. Alfred Young defended. On January 2nd a beast was bought in Rugby auction market for £1. The animal was brought to defendant's slaughter-house at Coventry, where the sanitary inspector saw it shivering on the 4th. On the 6th he went into defendant's kitchens beneath the shop, and saw, near a sausage machine, the carcase of beef. Judkins was asked what he intended to do with the beef, and he said he was going to boil it and give it to the pigs. The inspector went away to fetch other local sanitary officers, and told defendant not to move the meat meanwhile. On his return with Dr. Fenton (medical officer of health) and Mr. Dale (veterinary surgeon), however, the carcase had been taken to the next neighbour's kitchen, and had been cut about. The professional evidence was that the meat was soft and flabby, dark, and looked as though the animal had suffered from pleuro-pneumonia, but as the vital parts had been destroyed, there was no positive evidence on this point. All concurred, however, that the meat was unfit for human food, and Judkins told Dr. Fenton he knew it was not. Mr. A. Young contended that the animal was bought in perfect good faith, that there was no proof that it was diseased, or that defendant knew the meat was not fit for the food of man. The Mayor said the bench had no alternative but to convict, and they fined the defendant £10, with £4 11s. 6d. expenses, which was paid. Mr. Young spoke of an appeal on two preliminary points he raised, and which, he had contended, were fatal to the summons. They were, that the proceedings had been taken without the authority of the Corporation, and that the case had been taken for an alleged offence other than that ordered by the Sanitary Committee.

GIN.

David Davies, Mason's Arms, Llanybyther, Carmarthenshire, for unlawfully selling gin which was not of the nature, substance, and quality demanded by the complainant at Penlan, Llanfihangel Ystrad, on February 7th, 1893, was fined £2 and costs, or in default one month's imprisonment.

RUM.

At the Clerkenwell Police-court, on Wednesday, the 22nd ult., Colin Outram, landlord of the "Milford Haven" public house, Caledonian-road, was summoned at the instance of the Islington Vestry, for selling, on January 20th, a pint of rum, which was found when analysed to be 6.1 below the legal standard of 25 degrees under proof. Inspector Cowling proved the purchase. Mr. A. J. Ford, who defended, pleaded guilty on behalf of his client, and urged, in mitigation, that water was added by a dishonest barman. Evidence was called in proof of that statement. A fine of 40s. was imposed.

At Consett, on the 27th ult., Bernard McAleer was fined £6 and costs, for adulterating rum with 16.5 per cent. of excess water.

At the same court, William Palmer, of "Railway Tavern," Sherburne-terrace, was fined 30s. and costs, for adulterating rum with 6 per cent. of added water.

WHISKY.

Sarah Evans, of the Monachty Arms, Aberayron, was summoned on the 23rd ult. at the Aberayron Police-court, for selling whisky which was 42 degrees under proof, was fined £3 and costs, or in default one month's imprisonment.

At Consett, on the 27th ult., Alexander Parker, Beehive Inn, Sherburne-terrace, was fined £4 and costs for adulterating whisky with 13.4 per cent. of water.

At the same court, Mrs. Elizabeth Redshaw, was fined £4 and costs for adulterating whisky with 10.50 per cent. excess of water.

Patrick Coyle, was fined £6 and costs for adulterating whisky with 20 per cent. excess of water.

William Hill, landlord of the Royal Hotel, Kirkburton, was fined 10s. and costs at the Huddersfield County Police-court, on the 27th ult., for selling whisky which was shown to be 27 degrees under proof, and adulterated with 3 per cent. of water. Martha Ann Carter, landlady of the Rose and Crown Inn, of the same place, was fined £1 1s. and costs for a similar offence. The addition of water in this case was 14 per cent. Mr. A. L. Bridge, a food and drugs inspector of the West Riding, laid the informations.

TINCTURE OF RHUBARB.

On the 22nd ult., at Barnard Castle, before Major Hodgson (chairman), Lord Barnard, Mr. J. B. Dale, Mr. Scarth, and Mr. Ralston, Charles Raine, of Bridgegate, grocer, appeared on a summons charging him with selling adulterated tincture of rhubarb. Mr. Barningham defended. Mr. Dunn, inspector, said that the ingredients of which the tincture, a compound drug, was composed represented such a variation of prices that it was possible to sell the drug of manufacture that generally affected its virtue, and therefore its value. The analyst said he found the contents of the proof spirit, &c., to be in fair commercial proportion, but he was of opinion that there was not a fair sample of genuine tincture of rhubarb; "nor do I hold that it has been prepared as prescribed in the 'British Pharmacopoeia.'" Mr. Barningham wanted to know what case he had to meet? There was no suggestion that defendant had adulterated. Tincture of rhubarb was asked for and supplied. The Chairman answered that the certificate showed a deficiency of 25 per cent. He should certainly not, as suggested by counsel, think of asking for tincture of rhubarb "as prescribed by the 'British Pharmacopoeia.'" Mr. Barningham: But my client is not a chemist. The Bench answered that it was still undesirable a grocer should be selling a drug of which there was no standard or guarantee of quality or ingredients. Mr. Dunn quoted a Bench judgment sustaining the dictum of the Chairman that a customer was not bound to ask for the "British Pharmacopoeia" prescription when buying tincture of rhubarb. Mr. Barningham held that there were other standards of tincture than that of the "British Pharmacopoeia." The Bench fined defendant 20s., including costs.

UNSOOUND EGGS.

At Swansea Police-court on Thursday, 23rd ult., before Mr. J. C. Fowler, stipendiary, Messrs. A. Mason and W. Watkins, the Welsh Farm Produce Company, Union-street, Swansea, were charged with exposing for sale a quantity of unsound eggs on February 1. This is a case which has created some interest in Swansea, the quantity seized from an ex-town councillor being large, and the matter having been discussed at the last council meeting. Mr. Glascoedine appeared for the defendant, Mr. William Usher. Mr. Mason retired from the bench as soon as the case was opened, stating that he as a town councillor had authorised the prosecution. David Jones, inspector of nuisances, said he visited the shop of the defendant company and examined several boxes of eggs, and found that as near as could be judged three out of every five eggs were unsound. He called the attention of the medical officer of health to the case, and produced his certificate showing that ten boxes of eggs examined by him were unfit for human food. The ex-mayor had viewed the eggs, and issued a warrant for their destruction. Cross-examined by Mr. Glascoedine: He had not carried out the order of the magistrate. The eggs were not all destroyed. The good ones were allowed to be taken away by the owner, Mr. Usher. Five boxes were so taken away. The only way they had of examining the eggs at that time was by smashing them. He smashed them till he could stand it no longer. (Laughter.) He would not swear that 4,000 out of the 7,000 were allowed to be taken away as good. The witness, in further cross-examination, contradicted himself on two points, and said he "must have been confused" about the facts. Dr. Ebenezer Davis corroborated. If two eggs out of three were bad he should consider himself justified in condemning all; but if one out of three he should not. They took six eggs out of each box. He did not consider the tester a complete or satisfactory test of an egg. He considered breaking them a more satisfactory test. There was, he thought, no perfect way of testing except breaking. He did not consider a merchant should submit his eggs to the "most perfect" test. They broke from 20 to 30, and tested 40 or 50 more. He should say that quite two-thirds were bad, and those tested at the mortuary showed a worse result. Inspector Jones, re-called, said he knew at the time he made his report that all the eggs were not bad, yet he had said they were. Thomas Owen Davies, assistant in the egg shop, said they always tested the eggs with the patent tester before selling, and they intended testing these that evening. Out of 7,000 seized, 3,500 to 4,000 were returned as good. Daniel Evans, manager at the shop, also gave evidence. Mr. Glascoedine having addressed the bench for the defence, the Stipendiary said he would take till Tuesday next to consider his decision.

PUBLIC ANALYSTS AND SOMERSET HOUSE.

The *Civilian*, the accredited organ of the Civil service, in its issue of February 25th says:—

Not for the first time have the outside public come into a sort of mild conflict with the Laboratory Department at Somerset House, and the prominence given to the action of the Society of Analysts in connection with the wording of certificates given by Dr. Bell, the head of the Laboratory, on samples sent to him under the Sale of Food and Drugs Act, will most probably lead to some alteration in the law as it now stands. The complaint put forward by the members of the society is, that in the analyses of samples of milk, the usual report declares that he is unable to affirm that water has been added, and this body suggest that in cases which appear to be doubtful, and in which water has probably been added, although the analytical results do not enable a positive judgment to be given, it would only be fair and proper to add to the certificate that the results of the examination are at the same time compatible with the presence of a certain portion of added water. The same complaints and the same suggestions have been made regarding other articles of food examined at Somerset House, and it has been pointed out that the method adopted by Dr. Bell leaves it open to question whether the samples examined do or do not afford evidence of their being genuine articles. The Inland Revenue authorities, through the Principal of the Laboratory, in the defence of their practice, express their fear that the suggested addition to the certificates would raise serious objections on the part of the public. It is possible that in merely stating the bare result of the analytical tests, the Board are acting in a perfectly safe manner, and that they are wise to refuse to enter upon any problematical explanations of results. But the society, which embraces all the best chemists of the country, are apparently determined to have their views of the matter brought before the proper authorities, and we shall not be surprised if a good deal of the work now entrusted to Somerset House is not sooner or later transferred to the Local Government Board. It is claimed that the present system of reference in the case of disputed analyses is unsatisfactory, and ought to be entirely remodelled. The administration of the Act has been so carried out at Somerset House, aided by the decisions of the magistrates, that, except in very exceptional cases, convictions are practically impossible.

In their own proper sphere—that is in the cases of adulteration of excisable articles—some instances have recently occurred in which the evidence put forward by the prosecution in attempting to prove offences against the Revenue laws has been looked upon as very unsatisfactory, but the Act gives a very decided advantage to the Somerset House authorities as the official analysts, and the doubt nearly always goes in favour of the Revenue authorities. As Dr. Bell is one of the “indispensable” officials discovered by Sir A. West, it is not pleasant to see so much dissatisfaction expressed by such an important body of scientific men as the Society of Analysts, for their opinion, as experts, must weigh against that of an unprofessional Chairman of the Inland Revenue Board. However, an opportunity will soon occur of introducing another guiding spirit. Meanwhile, we hope that the present disagreeableness will not militate against the success of the scheme for the improvement of the Laboratory officials’ pay and prospects, which has been for some time before the Treasury. We understand, however, that the settlement of the new scheme is now delayed by the determination of the Government to institute an inquiry into the working of that department, with particular regard to the circumstances which have given rise to the recent action concerning it. The divergence of opinion existing between the Inland Revenue authorities and other experts on the questions inquired into by the House of Commons’ Committee on the bonding of spirits, leaves something to be desired in the direction of arriving at a more satisfactory determination of problems which so largely affect various classes of the public.”

We have heard something of the scandal—entirely unconnected with the working of the Food and Drugs Act—which has determined the Government to enquire into the working of the department, and will favour the public with it in an early issue. For the present we will content ourselves by saying, that it reveals so childish an inaptitude that were it not that it has enabled some not over acute swindlers to defraud the revenue of many thousands of pounds, it would be laughable. If a last straw were wanted to break the back of the discredited pseudo-scientific department it would be found in the manner in which Somerset House will “snuff” itself out. It has long “denatured” science. It remains to be seen if it will “denature” reason, and burke this other exhibition of incompetence. Like our contemporary, *The Civilian*, we think not.

IMPORTANT QUESTION OF MILK ADULTERATION IN SCOTLAND.

EXTRAORDINARY EVIDENCE OF PUBLIC ANALYST.

In the Sheriff Court, Paisley, on the 2nd inst., Sheriff Cowan heard a complaint at the instance of Mr. W. W. Kelso, the sanitary inspector, accusing a dairymen of supplying, on 26th January, as

genuine sweet milk an article diluted with 16 per cent., or thereby, of skim milk, or that had been deprived of, or had had extracted from it 16 per cent. of its natural fat or cream, contrary to the Sale of Food and Drugs Act. The case practically resolved itself into the question of what constituted pure sweet milk. One witness stated that the milk as supplied by the respondent soured quickly, but she admitted that the dishes in which it was kept might not have been cleaned properly. Dr. Clark, public analyst, Glasgow, who appeared as a witness for the complainer, stated that the milk had been analysed by him, and was according to the complaint. When skim milk was added to sweet, the mixture would sour more readily than if pure. He based his calculations on the Somerset House standard for pure milk which gave as a minimum 2½ per cent. of fat, and 8½ per cent. of other solids. In the milk he had analysed there was 2.08 per cent. of fat, and 9.14 of solids. He regarded the Somerset House standard as a very low one. In fact, he said, in the case of good milk, bulk for bulk of skim milk could be added without bringing the mixture under it. In cross-examination, he said there had been a sample of pure cow's milk taken which only contained 1.92 per cent. of fat; but that was in the case of an individual cow, the lowest in dairy milk being 2.95 per cent. of fat. Only two or three samples of several hundreds taken from individual cows had been found below the standard. Mr. R. Tatlock, public analyst, Glasgow, said he had analysed the milk on behalf of the respondent on the 24th February, nearly a month after it was taken, and had found it to contain 2.15 per cent. of fat. In his opinion it was pure milk. Analysts, he explained, only went on the Somerset House standard when once adulteration was proved, but in the present case he held that was not proven. He would not consider that milk had been adulterated unless it contained less than 1.92 per cent. of fat, or less than the lowest authenticated sample. What was possible with one cow might be possible with many. The respondent's wife and the servant stated that the milk had not been adulterated in any way. The Sheriff, looking at the divergence of scientific opinion and the evidence of the respondent's wife, said he could not do otherwise than find the charge not proven.

Mr. Benjamin Lang, solicitor, acted for the respondent; and Mr. William Walker, burgh fiscal for the complainer.

Here again we have the Somerset House standards working against public interest. We regret to see it, and we have also the spectacle of a public analyst, and we believe a member of the Society of Public Analysts, deliberately stating that he would not consider milk adulterated unless the per-centage were less than 1.92 of fat. This evidence caused the sheriff to dismiss the case. Let us see what justification exists for this astounding statement. There are more analyses of milk made at the laboratory of the Aylesbury Dairy Company than in any laboratory or laboratories in the kingdom. The *Analyst*, March 1893, contains a paper by Mr. Droop Richmond, reporting the results of the analysis of 23,865 samples of milk in 1892. These results prove the Somerset House standard unscientific and fraudulent to the public, and they also show that the evidence of Mr. Tatlock was not worth the attention it received: that in plain words he did not know what he was taking about, i.e., if the above report of his evidence be correct. The 23,865 analyses gave results as follows:—

On Arrival.						Before De- livery.	At com- mence- ment of Delivery.	During De- livery.	After De- livery.
Spec. Grav.	Tot. Sol.	Fat.	S.-N.-F.	T.S.	T.S.	T.S.	T.S.	T.S.	T.S.
Jan. 1.0322	12.91	4.02	8.89	12.77	—	12.79	12.80		
Feb. 1.0323	12.84	3.95	8.89	12.72	—	12.75	12.83		
Mar. 1.0322	12.74	3.88	8.86	12.72	—	12.73	12.72		
April 1.0322	12.54	3.72	8.82	12.46	12.31	12.44	12.49		
May 1.0323	12.54	3.70	8.84	12.49	12.41	12.42	12.50		
June 1.0322	12.42	3.62	8.80	12.32	12.25	12.24	12.40		
July 1.0316	12.74	3.74	8.73	12.89	12.33	12.34	12.44		
Aug. 1.0315	12.57	3.89	8.68	12.48	12.41	12.45	12.48		
Sept. 1.0316	12.71	4.00	8.71	12.67	12.56	12.67	12.68		
Oct. 1.0318	12.94	4.15	8.79	12.81	12.72	12.73	12.81		
Nov. 1.0318	13.03	4.23	8.80	12.79	12.76	12.78	12.85		
Dec. 1.0318	12.80	4.02	8.78	12.61	12.63	12.76	12.73		
Avg. 1.0320	12.71	3.91	8.80	12.60	(12.54)	12.59	12.65		

It will be seen that the lowest average percentage of fat was only 3.62, and the mean average 3.91 of fat. What, then, are we to think of the statement that milk must not be considered adulterated unless it falls below 1.92 of fat. Cows yielding such fluid ought to be poleaxed. It is, to our thinking, greatly to be regretted that scientists should appear in court to give evidence of this character, and we trust that the publication of the results of these 23,865 milk analyses will enable those prosecuting for milk adulteration to in future not only show that such evidence ought not to be accepted, but that Somerset House is no authority, and that magistrates can treat its standards—as they ought to be treated—with contempt. To do otherwise is to permit fraud to the extent of millions of pounds.

THE "DANISH BUTTER COMPANY."

IMPORTANT PROSECUTIONS: HEAVY FINES.

At Consett Petty Sessions, on the 27th ult., John Wesley Emmerson, manager for the Danish Butter Company, Middle-street, Consett, appeared to answer a charge instituted by Mr. Laidlaw, under the Food and Drugs Act, for adulteration of butter on the 2nd February.

Inspector Laidlaw said the present case was one which they considered more serious than generally happened. Proceedings were taken under Section 6 of the Act, and was with reference to $\frac{1}{2}$ lb. of butter that had been purchased at defendant's shop, and the half of the same proved to be nothing more or less than fat. On the 2nd February his assistant (Mr. Wilson) went to the Danish Butter Company's establishment for a sample of butter, which was purchased and forwarded to him, and the next day it was sent to the public analyst (Mr. Stock). On the 11th February he received a certificate setting forth that the same was adulterated with fat and margarine to the extent of 50 per cent.

John Wilson said that on instructions he proceeded to defendant's shop. Witness asked for $\frac{1}{2}$ lb. of butter, and was asked by defendant's wife "What price?" He replied that he was "not particular," and was then served with a packet taken from the shelf, and charged 7d. for the same. Witness then told Mrs. Emmerson that the butter was purchased for the purpose of having it analysed. She replied, "Oh, no; this is not the right sort," and then put her hand out to seize the packet. Witness replied, "Excuse me, this is my property," and then inquired if she had any objections. The woman then said that he (witness) had better wait till the manager arrived. On defendant's arrival, he (witness) stated his business, and as defendant did not make any objections the butter was divided.

In answer to the Inspector, witness said the butter was wrapped in two papers, and one had printed upon it "Butter."

Cross-examined by Mr. Welford: Defendant was at dinner when he went to the shop. He asked for $\frac{1}{2}$ lb. of butter, and got $\frac{1}{2}$ lb. of butter margarine.

Mr. Welford said that there had been a mistake, or the Assistant-Inspector would never have got butter. On that morning defendant had been out hawking, and ran short of margarine papers. A certain party came to him for a $\frac{1}{2}$ lb. of margarine, and he took a pound, cut it in two, sold one half, and then wrapped the other $\frac{1}{2}$ lb. up in the "butter" paper. Defendant brought it back to the shop, and never said anything to his wife that it was margarine. While the manager was out for his dinner, in came the Inspector, and the woman inadvertently gave him the packet wrapped up in the butter paper, thinking it was all right.

The Inspector: Defendant is summoned for another offence under the same transaction.

Mr. Welford: Now then, that is hardly fair. The other offence against defendant is in not having the same article wrapped up in a proper paper.

The Chairman: I see. You have either case under the Margarine Act.

The Inspector: Yes; but if your worships think fit, I will withdraw the other charge.

The Chairman: It is for you to say whether you will withdraw the same or not.

The Inspector: Very well. I will withdraw the second case.

After an absence of half-an-hour, the Chairman said they had given the case their careful consideration, and they were unanimously of opinion that it was very much worse than the preceding cases, which were in regard to the adulteration of spirits with a certain proportion of water. He might inform the defendant that the magistrates had taken the trouble to go and personally inspect his premises. They noticed that the shop window was placarded with such words as Danish Butter and so forth, in very large letters printed on slips of paper. They could not see any butter in the window or in the shop when looking from the street, but saw several heaps of the article labelled, in very small letters, "Margarine." From the opposite side of the road the letters were not readable, in fact, hardly discernible, whilst the large capitals offering butter were strikingly in evidence, and they thought this was calculated to deceive the public. The Bench had the power to inflict a penalty of £20 and costs, and seeing that it was a company, and not a small shopkeeper who was concerned in the present proceedings, they were unanimously of opinion that a less fine would not meet the justice of the case. They could not tell how long the sales had been going on to the prejudice of the consumers, and the public must be protected from adulteration in any form, more especially in regard to food. The Bench, therefore, decided to inflict the full penalty of £20 and costs.

Mr. Welford asked the Bench if they would allow the defendant time to pay the money. Seeing that it was the first offence, he asked for a week to consider what they would do. If they intended to appeal he would lodge the necessary notice within that time.

The Bench granted the application.

At the Cardiff County Police-court, on the 24th ult., John Bellamy Lascelles, of 9, Plantagenet-street, and manager of the Hayes branch of the Danish Butter Company, was summoned for selling a pound of butter not of the nature, substance, and quality demanded, the same being margarine. Defendant denied the offence. Evidence was given by a boy to the effect that on the 21st of January, by instructions of an inspector under the Act (C. Hill), he went to the shop managed by the defendant in the Hayes and asked for a pound of shilling butter, at the same time pointing to butter on the counter wrapped up in half-pounds. He received a pound, and paid a shilling for it. He didn't ask for butter. Inspector Hill said when he

received the butter from the boy he took it back to the shop and told defendant that it had been purchased for public analysis and offered to divide it. Defendant accepted the offer, but remarked to witness that he supposed he was aware there was a label on the butter. He (witness) replied that he had not seen the label when he entered the shop. (At this juncture the label in which the butter was wrapped when given to the boy was shown to the bench. It stated that the Danish Butter Company sold pure dairy butter, delicious, fresh, and fragrant.) Witness, continuing, said he went into the shop to look for a label, but it was not visible to the purchaser, though he was afterwards shown a margarine label near the dish from which the article sold to the boy was taken. Mr. Lloyd produced the analyst's certificate, stating that the article contained 5 per cent. of butter and 95 per cent. of margarine. The defence set up was that the boy sent into the shop did not ask for butter, but pointed to the dish containing the margarine, and said, "A pound of that." Defendant explained to the bench that he had two kinds of wrappers in the shop—one for butter, this being the one shown to the bench—and the other for margarine. The latter were kept near the dish containing the margarine, and in view of the purchaser, but sometimes in the hurry of business they got displaced a little, and on the present occasion he admitted having made the mistake of putting the margarine in the butter wrapper produced, but denied any wilful misrepresentation, saying that it was of no advantage to himself to sell margarine for butter. All he had to do was to manage the shop for his employers. The Bench considered the case proved, and that margarine was sold to the prejudice of the purchaser, he having asked for butter. A fine of £3 and costs, or a month's imprisonment in default of distress, was imposed.

A FOOD AND DRUGS ACT REFEREE ENGAGED IN THE SALE OF FOOD AND DRUGS.

The following appears in a daily contemporary:—

CIVIL SERVICE SUPPLY ASSOCIATION.

The general annual meeting of this association was held last evening at Cannon-street Hotel. Mr. R. BANNISTER presided, and there was a large attendance of shareholders. The half-yearly report of the committee of management was presented, and stated that after allowing for interest on the reserve fund, the net balance amounted to £25,689, which, with the addition of £4,490 brought forward from the preceding half-year, made a total of £30,179. It was proposed to pay 12s. in respect of each A, or fully paid-up share, and a proportionate amount in respect of each B share, to transfer £3,000 to the reserve fund, and to grant £1,000 to the Pension and Gratuity Fund, and £250 to the Employee's Provident Fund, which would leave £4,662 to be carried forward. In moving the adoption of the report and balance-sheet, the Chairman said that the last year had been one of general depression, from which the co-operative societies had not been exempt. It had been stated that the result in the association had not been so much due to depression of trade as to bad management, and that every other co-operative society had increased in trade. He proceeded to show, by means of figures, that such was not the case. In referring to the balance-sheet, he said that in comparison with the corresponding period of the preceding year the sales showed a falling off of £37,466, or about four per cent. on their total amount. After considerable discussion the report and balance-sheet were adopted almost unanimously.

WHAT IS SODA WATER?

We are glad to see that a vigorous protest is being made by the principal manufacturers of mineral waters against the absurd statements of the counsel for the defence in the Brentford soda water prosecution, that aerated water is commonly substituted for soda water, and is, in fact, better than soda water made with bi-carbonate of soda. Firms like Messrs. Rawlings, Ellis & Son, and Schewepe would not have reached the position they have if they had been given to any such practices. The recognised constituents of soda water are from 10 to 15 grains of bicarbonate to the ten-ounce bottle, and we have yet to learn that "soda" water can be termed "soda water" without it. The case is to be taken to appeal, when, no doubt, some instructive evidence will be forthcoming which will determine whether the labelling of aerated water as "soda water" is legal or not.

"GRANULATED MILK."

We have taken the following remarkable statement from the *Kent Coast Times*:—

CAUTION.—We notice that there has lately been introduced into Ramsgate an article of consumption known as "Granulated Milk," a 10 $\frac{1}{2}$ d. tin of which will make five gallons of milk. Judging, however, by the experience which has befallen one of the leading and most energetic business men of the town, readers would do well to see that they are supplied with a genuine article, as the gentleman in question—who is one of our municipal rulers—obtained a tin supposed to contain granulated milk, but on opening it discovered that the contents were sand, etc.

A NEW MEAT EXTRACT.

Mr. R. W. Anderson, of 92, Upper Thames-street, has brought out a new preparation, Liebig's Extract of Mutton, of which it is stated that if boiled with fresh vegetables it produces the perfection of nutritious mutton broth. It is also said to be perfectly devoid of fat, and suitable, therefore, for feeble digestions. We shall give in an early issue an analysis of the preparation.

REVIEWS AND NOTICES OF BOOKS.

TRANSACTIONS OF THE SEVENTH INTERNATIONAL CONGRESS OF HYGIENE AND DEMOGRAPHY. Vol. 10, division II, Demography. Eyre and Spottiswoode, London, 2s. 6d.

This volume contains papers on mortality in relation to occupation, by Wm. Ogle, M.D., F.R.C.P., Dr. Bertillon and Dr. Fleury; on Thrift in Great Britain, by Mr. Rowland Hamilton, F.G.S.; the Board and Lodging of London Work Girls, by Mr. F. H. Whymper; the Protection of Workmen in Factories, by Dr. Migerka; the Economic Advantages of Industrial Hygiene, by Mr. B. H. Thwaite; Migrations, by M. Levasseur; Tropical Highlands, by Dr. Felkin, Surgeon-General Sir William Moore, Dr. C. L. Van der Burg, Mr. Clements R. Markham, C.B.; the Growth and Development of Anglo-Indian Children, by Dr. G. M. Giles; on the Influence of Clays and Limestones on Medical Geography, and the Geological Distribution of Cancer amongst Females in England and Wales, by Mr. Alfred Haveland; the Influence of Geology upon Health, by Mr. W. Topley, F.R.S.; Indian Factory Legislation, by Mr. Holt S. Hallett, C.E.; Indian Factory Labour, by Dr. K. N. Bahadurji, and other papers of importance to sanitarians.

SANITARY PROSECUTIONS.

A COMMON COUNCILMAN'S INSANITARY HOUSES.

James Dowling, of 18 and 19, Grand-avenue, Leadenhall-market, was summoned before Mr. R. O. B. Lane, Q.C., at the North London Police-court, on the 6th inst., for having certain houses—viz., Nos. 39, 41, 43, Queen's-road, Dalston, in an insanitary condition. The case has occupied the attention of the court on several occasions (the summonses being taken out by Sanitary Inspector Stiles, at the instance of the Shoreditch Vestry, who alleged undue delay and unsatisfactory work). Mr. G. W. Clarke, assistant-vestry clerk, appeared for the vestry. It appeared from the evidence that the defendant's attention was called to these premises as far back as May last, 1892, the drains being defective, no water to w.c.'s, and floors, stairs, doors, &c., in the last stage of dilapidation. It was admitted that two-thirds of the work was done, but the inspector stated he had visited the premises several times since the last adjournment, and found the water flowing through the roof, and that pails, &c., were being used to catch it. The defendant declared that the frost had delayed the work, and, as far as he knew, his instructions to his builder to thoroughly do the work had been carried out. He alleged that he had been persecuted by the sanitary officer of Shoreditch because he did not give the work to a builder whom he nominated, but this the inspector strongly denied. Mr. Waddy, barrister, who appeared for the defendant, said he would withdraw the allegation. Mr. Lane was glad to hear him say so, for there was not the slightest evidence to support the charge, and he hoped this would be a warning to defendant in future not to make such reckless statements. It appeared to him that the vestry and inspector had only done their duty, and as the work was now completed, he would suggest that the summonses be withdrawn on payment of the costs. This was agreed to.

IMPORTANT TO GROCERS.

List of articles for the sale of which grocers risk prosecution :
LIST OF ARTICLES BELIEVED TO BE LABELED "POISON" BY
THE PROPRIETORS.

Atkinson and Barker's Infants' Preservative.	James's Phosphor Paste.
Barton's Rat Poison.	Jeremie's Sedative.
Bateman's Drops.	Kay's Essence of Linseed.
Battle's Vermin Killer.	Leath and Ross's Neuralline.
Blackburn's Cough Elixir.	Mandall's Licoricine.
Bows' (Dr.) Liniment.	M'Cann's Mixture.
Bradley's Cherry Pectoral.	Norburn's Nerve Tincture.
Brompton's Cough Specific.	Powell's Balsam of Aniseed.
Brown's Chlorodyne.	Rankin's Head Ointment.
Chase's Beetle Poison.	Roth and Ringersen's Paste.
Crosby's Cough Elixir.	"Rough on Rats."
Court's Drops.	Simpson's Morphine Solution.
Eaton's Cough Syrup.	Smith's Dog Pills.
Fellow's Syrup Hypophosphites.	Squire's Grand Elixir.
Fenning's Stomach Mixture.	Steiner's Cyanide Paste.
Ferris' Anodyne Amyl Colloid.	Steiner's Vermin Killer.
Ferris' Nephenthe.	Stone's Muricidane.
Freeman's Chlorodyne Lozenges.	Summer's Cough Lozenges.
Gibson's Vermin Killer.	Teasdale's Chlorodyne.
Hunter's Syrup of Chloral.	Towle's Chlorodyne.
Hunter's Vermin Killer.	Tuna.
	Winslow's Syrup.

The sale of any patent medicines containing poison is an offence against the Pharmacy Act.

LONDON WATER.—The examiners appointed by Government report that, "In respect to its general characters, and especially to the smallness of the proportion of organic matter present, the condition of the water supplied to the metropolis during the month of January was, notwithstanding the unfavourableness of the season, entirely satisfactory.

WEDNESDAY'S LONDON PRODUCE MARKETS.

CORN.—The attendance at Mark-lane was small, and very little business was done. Fine English wheats were firmly held. Foreign quiet and unchanged. Maize slow at late rates. Barley quiet. Oats in limited demand at former prices. Flour inactive. Beans and peas unchanged. Arrivals this week:—English and Scotch: Wheat, 550 quarters. Foreign: Wheat, 6,290; barley, 1,370; oats, 3,520; beans, 950; maize, 7,720 quarters; flour, 18,120 sacks. The cargo market has a very quiet tone. White wheats remain steady, and Tuesday's bids are repeated; for Walla Walla off coast, 28s. bid; Californian offered at 30s. 3d. with buyers at 3d. less; for Californian off coast, 29s. 6d. is the best bid. For a Plate steamer, March shipment, 26s 6d bid; ditto steamer, April-May, 26s 3d bid; Indians dull and inactive; Americans steady, quiet; a parcel of Kansas afloat to London sold, 27s 3d. Maize steady, quiet. Danubian, July sold, 19s 4½d; ditto April-May shipment sold, 19s 3d; Galatz Foxonian, July-August, 20s 1½d. Barley quiet steady; for Azoff—Crimean, April-May shipment, 15s 1½d bid, 15s 3d wanted; for ditto, May-June shipment, 15s 3d bid.

SUGAR.—Refined goods meet a fair inquiry, pieces and yellow crystals realise firm prices. In stoved goods a moderate trade done at former rates. Foreign refined quiet, but continental granulated continues in steady demand at 16s 5½d to 16s 9d, according mark and prompt. Dutch crushed, slow prompt, 17s to 17s 3d according to mark. Say's cubes, March-April offer at 18s 9d, loaves, April 17s 6d f.m.s.; cubes, April 17s 6d, f.o.b. French crystals, No. 3, 17s. Cane descriptions very quiet. Tate's cubes, firsts, sell at 20s 9d; seconds, 19s 9d; crushed, first, 18s 6d; Liverpool crystals, firsts, 19s 3d, small 19s; seconds, 18s 6d; granulated, 18s; Martineau's cubes, firsts, 20s 6d; seconds, 18s 9d; titlers, 19s 6d; pulverised, 19s; chips, 18s 6d; granulated, 18s 6d per cwt. In the afternoon the tone improved, and advanced ½ per cent., the market closing quiet, firm.

CORK BUTTER.—Firsts, 106s; seconds, 94s.; thirds, 83s.; fourths, 60s. Kegs:—Mild cured Firkins, superfine, —; fine, 103s; mild, 90s. In market, 57 firkins.

LONDON CENTRAL MEAT.—Moderate supplies of beef, including 900 quarters American refrigerated, 150 being fores. Trade steady, and rates rather firm. Mutton supplies adequate. Best Scotch rather firmer; other kinds steady. Prime veal scarce, and very dear. Pork without essential change. Beef: Scotch sides, 3s 6d to 3s 10d; shorts, 3s 8d to 4s 2d; American Deptford-killed, 3s 4d to 3s 7d; Liverpool-killed, 3s 3d to 3s 6d; refrigerated hind-quarters, best, 3s 4d to 3s 8d; average, 3s 6d; seconds, 3s 2d to 3s 8d, average 3s 5d; thirds, 3s 2d to 3s 6d, average, 3s 4d; fourths, 3s to 3s 6d, average, 3s 3d; fores, best, 2s 4d to 2s 6d, average, 2s 5d. Mutton: Scotch, 4s to 4s 4d; English, 3s 10d to 4s 1d; ewe, 3s 2d to 3s 6d; New Zealand, 2s 7d to 2s 11; Sydney, 2s to 2s 2d. Veal, 4s 8d to 5s 6d. Pork, small, 5s to 5s 2d; large, 4s 4d to 5s per 8lb.

TEA.—At the public sales Indian teas sold with a good competition, at full rates for the lower grades. Futures dull. London Produce Clearing House quotations of good common China congou. March, 6 8-16d; April 6 8-16d; May, 6 3-16; June, 6 6-16; July, 6d; August, 5 10-16d; September, 5 8-16d; October, 5 6-16d; November, 5 4-16d; December, 5 3-16d per lb. Sales registered, nil. Fair whole leaf Indian: March, 8 6-16d; April, 8 6-16d; May, 8 6-16d; June, 8 3-16d; July, 8 1-16d; August, 8d; September 7 13-16d; October, 7 9-16d; November, 7 1-16d; December, 7 1-16d per lb. Sales registered, 800 chests.

COFFEE.—On the spot a steady demand prevails, and better qualities realise full rates. At auctions: 74 casks 23 tierces 30 barrels plantation Ceylon sold 131s to 121s; small, 104s to 112s 6d; peas, 131s to 138s. 1,389 bags, East Indian sold, 106s to 115s; small, 101s to 105s 6d; peas, 118s 6d to 124s. 8 casks 10 tierces 245 barrels 184 bags Jamaica sold, 97s 6d to 109s; peas, 103s to 115s 6d. 1,024 bags Costa Rica sold, 101s to 110s 6d; peas, 117s. 566 bags Guatemala mostly sold, 102s to 110s. 170 bags New Granada sold 98s 6d to 101s 6d. 100 bags Salvador 102 to 104s; peas, 110s 6d. 240 bags Columbian partly sold, 98s 6d to 100s. Futures quiet, April sold, 80s 6d, closing quiet. New York opened unchanged to 10 points down; Havre, March, 10½; Hamburg, March, 84½m; Amsterdam, 54½c. London Produce Clearing House quotations of fair Channel Rio:—First call: March, 80s 9d; April, 80s 6d; May, 80s; June, 80s; July, 79s 3d; August, 79s ½d; September, 79s 3d; October, 79s 3d; November, 79s 3d; December, 78s 3d; January, 78s. Second call: Same as first. Sales registered, 1,500 bags.

To the PUBLISHER,

"FOOD, DRUGS AND DRINK,"

183, Strand, W.C.

Please forward me a copy of "FOOD, DRUGS, AND DRINK," weekly, for twelve months, for which I enclose Six Shillings and Sixpence.

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"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

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BUYERS of Carbolic Powder are advised to have their supplies carefully tested, as very low grades are frequently substituted for, and sold as, 15% quality.

CALVERT'S CARBOLIC POWDER

IS GUARANTEED to contain 15% of full strength CARBOLIC and CRESYLIC ACIDS, and prices for same will be quoted to any applicant naming the quantity required.

F. C. CALVERT & CO., Manchester,

Have been awarded 60 Gold and Silver Medals, and Diplomas for the superior excellence of their preparations, in most cases after careful trial against other Disinfectants exhibited.

Bird's Baking Powder,

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Bird's Custard Powder,

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are all guaranteed absolutely pure and wholesome, and free from any injurious ingredient whatever.

Food, Drugs and Drink,
—THE—

PUBLIC ANALYTICAL JOURNAL
AND SANITARY REVIEW.

SATURDAY, MARCH 18, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 83, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

DR. CAMERON'S BILL.

THE long expected Bill of Dr. Cameron to Amend the Sale of Food and Drugs Act, 1875, and the Margarine Act, 1887, has been issued, and is backed by Mr. Channing, Dr. Farquharson, Mr. Frederick Frye, and Mr. Kearley. A more feeble effort at legislation it would be difficult to imagine. Dr. Cameron has misnamed it: its title ought to be "a Bill to stultify existing Adulteration Acts and to encourage fraud." We invite the attention of grocers, Food and Drugs Act Inspectors, Local Authorities, Public Analysts, and the public generally, to the provisions of the proposed Bill as given in our present issue, and to

a plain statement of facts about the Bill. We will deal first with the effect of Dr. Cameron's Bill upon the retail grocer.

We have always contended on behalf of the grocers, as a body, that when an article is sold in the same condition as received from the wholesale dealer or manufacturer, and is found to be adulterated, the retailer is entitled to immunity from punishment if he can prove that he bought the article as genuine, but—and here is the all-important point—the wholesale dealer or manufacturer should be punished, for he it is who really gains by the adulteration. How many grocers, for example, have been prosecuted for vending butter, lard, cocoa, mustard, baking-powder, and other articles, and have incurred odium, loss of business and expense in connection with such prosecutions? Everyone conversant with the Acts knows that hundreds of grocers are prosecuted and fined for selling articles such as Fry's and Epps' Pearl and Homœopathic Cocoas, Colman's Compound Mustard, and the like, which grocers have sold in the full belief that they were pure cocoa or mustard. But who have been punished? Not the Fry's and Colman's—the colossal traders and manufacturers—but the struggling grocer whose first knowledge of the fact that the article he vends is adulterated comes with the Inspector's summons. How does Dr. Cameron's Bill meet this grievance of the grocer? In no manner whatsoever. It provides that the invoice shall be a warranty; but it provides no method whatever of punishing the wholesale dealer or manufacturer who gives the warranty, so that as heretofore the grocer will be the victim of adulterating manufacturers, and have all the odium of prosecution with consequent loss of trade. He will be proved to vend adulterated articles, and be branded as a thief, whilst the real offender escapes punishment. Surely Dr. Cameron is not so ignorant of the question as to be unaware of the fact, that whilst grocers, milkmen, and others, have for long enough produced "warranties," and have thus been exculpated from fine for proved adulteration, there are no cases where the person giving the warranty has been proceeded against. Then, as to the proportion of water in butter, Dr. Cameron has left this designedly blank. The correct proportion of water naturally present in butter is well enough known to all public analysts as twelve per cent. Grocers know to their cost that the butter they buy contains more than that proportion, being nearer twenty-five per cent. water than twelve per cent. They know how it floods their counters, and how the water, for which they have paid 110s. per cwt., runs away from the butter, causing a loss of several shillings per cwt. on the sale of the "excess watered" article. Any percentage over fifteen means a loss to the grocers by water exudation; but will the retail grocers be at all provided against this fraud of the butter factor in this miserable Bill? We can assure them that they will not. The combination of butter factors is too strong and too well organised. It has its members in the House of Commons living by butter and bacon frauds, and if Dr. Cameron's foolish Bill is ever heard of again, these members are prepared to move heaven and earth to legalise the permission of twenty per cent. of water in butter and thus continue to rob the grocers and the public under the protection of an Act of Parliament. Grocers know that of twenty per cent. of water in butter they lose at least three to five per cent., which runs away waste.

But apart from the grocer's aspect of the question, there is the broad one of the protection of the public from fraud. It is a gratifying sign to find so many representative assemblies of grocers condemning adulteration, but still adulteration is widely practised, and as we have repeatedly shown, with impunity, by the owners of mammoth stores and impostors who lavishly advertise. It is a subject for serious consideration how far the deadlock which Dr. Cameron's Bill would create would operate in leading vestries and like authorities now charged with the

administration of the Acts, to give up in despair their efforts to check adulteration when they saw no means of getting at the real offender. In this event fraud would become universal, and the whole of the grocery trade be delivered over to those who, happily, now only form a small unworthy part of it. The self-respecting honest grocer would be crushed out and the thief would reign supreme, whilst the public would be robbed in every food article, and authorities everywhere be powerless to protect the people or enforce the laws against adulteration; for this stupid clause of Dr. Cameron's would effectually tie their hands. In every way, therefore, the bill is a miserable imposture, and one that every honest man in the House of Commons should oppose. Grocers and the public want honest, sensible legislation, not tinkering; and the way to secure that is for the House of Commons to appoint a special committee to inquire into the working of the Sale of Food and Drugs' Acts, and to prepare a measure to deal with defects in the Acts and their administration. We hope some member will move for such a committee and block this measure of Dr. Cameron, for a more stupid and dangerous Bill it would be hard to draft.

CIRCULAR NOTES.

AUTHORITIES WAKING UP.

We are pleased to learn that at last the Sale of Food and Drugs Act is being put into operation in Salisbury, and that samples for analysis have been taken in that district. It is a healthy sign, not only for honest local traders and the public, but also for struggling English industries that "Free Fraud in food stuffs" is crushing out of existence.

AN EASY-GOING GUARDIANS' BOARD.

The guardians of the North Dublin Union have a low estimate of the morality of the milkman, or they would not take his venality as a matter of course. At their meeting on the 1st inst., the clerk announced that he had received a letter from Sir Charles Cameron giving results of analysis of samples of the milk supplied by two of the contractors, Messrs. King and Smith. The analysis showed that the milk had been adulterated with 12 per cent. of water. The clerk was directed to write to the defaulting contractors, that if any similar occurrence took place again, steps would be taken to cancel the contracts. Nothing more was done; but we are sure that if this contractor had come under the notice of the Corporation inspectors, it would not have been long before he would have been hauled up at the North Dublin Police Court.

ADULTERATION BY SEASIDE GROCERS.

It is our intention, at an early date, to take steps to expose in detail the dishonesty and fraud which is practised by the least reputable grocers and refreshment house keepers at many of our large watering places. The Corporations of these towns have ignored the protests made year after year by the President of the Local Government Board against the gross neglect of their duty to the Public, by refusing to put the provisions of the Sale of Food and Drugs Act and the Margarine Act into force, and we think it will be necessary to tell the inhabitants of these places some candid truths about the extent of the adulteration that goes on when no effort is made to check it. The Lowestoft Town Council, we are glad to see, has been courageous enough recently to take action against certain traders under the acts. The Sanitary Committee has consequently been attacked most venomously by anonymous correspondents in the local papers for "persecuting respectable tradesmen." But, as a correspondent of the *Lowestoft Standard* points out on the other side, "the rant about harassing respectable tradesmen is out of place. Respectable tradesmen should and do welcome the appearance of the inspector in their shops—it is a good advertisement for them so long as the analysis is all right and no conviction follows; but if these elements are absent, and both analyst and magistrate decide against them, where is the respectability? And if the respectability is absent, the more 'harassing and unrest' and the more attention they receive from the inspector, the better for the poor and needy who are obliged to deal with that class of men." We cordially agree with these remarks. They are not "respectable" tradesmen who suffer by the operation of the acts; they are the rogues and thieves.

HOW TO FATTEN THE SOMERSET HOUSE COW.

While Somerset House is doing its best to train down its standard cow to the level of 1.92 per cent. of fat in its milk, some sensible remarks on the advantages to be gained by training milkers up to a standard of 3 per cent. and upwards by a correspondent of the *Nottingham Daily Express*. It will be well for milk-sellers, he says, to know how they are to maintain, as far as in them lies, a certain excellence of quality, which may be applied, but which is not defined by law. There are four points which they must give earnest heed to if they are not to come under the lash of the law, and it seems to me that there must be much uncertainty in their minds when they have done their best, taking into consideration the effects of character, feeding, milking, &c. They must—

1. Keep good healthy cows, and always have a preference for those known to be good butter cows, as some cows' milk is worth little from a cream-yielding point of view.
2. These must be well fed, and that without fail every day in the year, and this applies not only to quantity but also to quality of food.
3. They must be thoroughly well milked, because most of the cream or fat comes in the afterings or strappings. So much is this the case that the milk may practically be skimmed in the milking.
4. See that their milk is thoroughly well mixed before measuring it out to each customer, because as it stands the cream gradually rises to the surface, and if not mixed and well stirred up, the first customers will get the creamy milk, and the last, as in this case you refer to, the poor dregs, that are sure to be deficient in cream.

SOMERSET HOUSE AND MILK STANDARDS.

CHICAGO ALLOWS NO SUCH PUBLIC PLUNDER.

There could be no more pungent criticism upon Somerset House blundering in the matter of milk standards than that afforded by the following extracts, taken from the Milk Ordinance of Chicago. It will be seen that the authorities there state no nonsense as to what is or is not milk.

Section 24 says:—

No milk shall be kept, sold, or offered for sale, stored, exchanged, transported, conveyed, carried, or delivered, or with such intent as aforesaid, be in the care, custody, control, or possession of anyone if it contain more than 88 per centum of watery fluids, or less than 12 per centum of total solids, of which total solids three of the per centams shall be butter fat.

Offenders under this section shall be deemed guilty of a misdemeanor, and on conviction thereof be punished by a fine of not less than twenty-five nor more than one hundred dollars for each and every offence.

Section 25 says:—

No cream shall be sold, offered for sale, exchanged, delivered, or be transported or carried for purposes of sale, offering for sale, exchange, or delivery, that contains less than 15 per centum of butter fat, or that is taken from any impure, diseased, unhealthy, unclean, adulterated, or unwholesome milk, or milk to which any foreign substance of any kind has been added, or milk from cows fed on the refuse or slops from distilleries, vinegar factories, or any similar slops, wash, or refuse, or any other than good and wholesome food.

Offenders under this section shall be deemed guilty of a misdemeanor, and on conviction thereof shall be fined not less than twenty-five nor more than one hundred dollars for each and every offence.

The heartless fraud involved in the selling of condensed milk made from "separated" milk, with its attendant evils of child starvation finds no quarter in Chicago. Section 26 of the Milk Ordinance says:—

No person shall manufacture, sell, or offer for sale any condensed or evaporated milk for domestic use, unless the same shall be put up in packages, upon which shall be distinctly labelled or stamped the name or brand by whom or under which the same is made. No condensed or evaporated milk shall be made, sold, or offered for sale, exchanged or delivered for domestic use unless the same is manufactured from pure, clean, fresh, healthy, unadulterated and wholesome milk from which the cream has not been removed, or unless the proportion of milk solids and butter-fat contained in the condensed or evaporated milk shall be in amount the equivalent of milk solids and butter-fat as provided by this ordinance.

For any violation of this section the offender shall be deemed guilty of a misdemeanor, and fined not less than twenty-five, nor more than one hundred, dollars for each and every offence.

An ordinance of this sensible and honest character is a severe reproach to our own want of legislation upon this important subject. Chicago insists upon a standard fair to the dairy farmer and to the public, and insists upon not less than £5 penalties. Our wretched food referees fix upon a miserable cow yielding a fluid with 1.92 per cent. of fat, and call that milk, and our magistrates encourage the plunder of the people by 2s. 6d. penalties. It is very evident that in this instance at any rate we are a long way behind the Americans.

PUBLIC HEALTH NOTES.

In a recent report to the Islington Vestry, Dr. Harris pointed out that to efficiently attend to the sanitary work of the parish it would be necessary to have six additional inspectors, and this increase would only put the parish on the same footing *pro rata* with the houses at the principal provincial towns. Were the number of sanitary inspectors to be *pro rata* with the population, 22 would be required instead of 14. The request was agreed to. Dr. Harris also suggested that for the protection of the public against personation by pseudo inspectors, the inspectors should be provided with uniforms. The preparations for meeting a possible cholera epidemic are complete. The parish is divided into 26 districts, each of which is provided with a medical man and a chemist. The public health committee have also sanctioned the purchase of a double set of disinfecting chambers, with laundry, etc., attached, and are about to purchase a large piece of ground for a disinfecting station. It is stated that when finished the chambers will be the finest in England.

St. Martin's-in-the-Fields Vestry has, we observe with satisfaction, at last began to stir itself. Three additional sanitary inspectors have been temporarily appointed, and are now making a house-to-house visitation in the parish. At least two-thirds of the houses, etc., already inspected, have been found unsatisfactory. This district has the Comedy, Drury Lane, The Adelphi, Toole's, Vaudeville, Garrick, Prince of Wales's, Haymarket, Alhambra, Trafalgar, Avenue, and Tivoli theatres under its control, and an inspection of some of these has revealed serious defects in some cases. The Haymarket Theatre drainage at the back of the theatre was condemned, and had to be entirely re-constructed; Drury Lane Theatre had about 20 obsolete D traps condemned, which are being replaced by Heliier's anti-D traps. One was underneath the Queen's room. The work, however, is now being satisfactorily done. Having advanced so far, it is hoped St. Martin's will go a step further, and appoint an inspector to attend to the Sale of the Food and Drugs Act. The neglect of this Act in the parish is an injustice on the inhabitants, an encouragement to dishonest trading, and an injustice to the traders who sell genuine articles.

The London Board School at Crown-court, Russell-street, W.C., is an old building taken over by the School Board, so that its sanitary defects were not the fault of the gang responsible for the scandalous insanitary condition of so many board schools in the metropolis. An examination by the St. Martin's Vestry inspectors revealed such serious defects that the school has been closed for nearly five weeks. The London School Board, of course, humbugged the matter as long as they could, but at last found delay and shuffling useless. The drainage was some eighty years old, and has had to be entirely reconstructed. The work has been done on the latest scientific principles by Messrs. Peattie and Axtell, Gloucester-road, South Kensington, and from a careful examination and a viewing of the tests made by Sanitary Inspectors Nicholas and Kelf, of the St. Martin's Vestry, the new drainage appears to have been excellently done, and the workmanship to be of the best character.

Amongst the "disgraceful" vestries of London, Hackney stands high. Some time ago we called attention to the intention of the vestry to combine the appointments of medical officer of health and public analyst. A temporary appointment has been made which the Local Government Board, we understand, refuses to sanction. We hope that no further combined appointments will be allowed, as the two positions have nothing in common.

At last Rotherhithe has begun to move in the right direction. It has now appointed two extra inspectors, and we hope to see a speedy improvement in the sanitary state of the district, and some work done with the Sale of Food and Drugs Act.

The Marylebone Sanitary Committee advised the appointment of two more inspectors some weeks ago, and Dr. Wynter Blyth has reported on the sanitary wants of the district, and asked for four more inspectors. Without demanding it, he has suggested that it might be found advisable to appoint one or two women inspectors. A recent statement by one who was well conversant with the sanitary needs of Marylebone was to the effect that there were 350 defective drains on which the sanitary authority could at any time lay its hands, but had no time to attend to.

In Lambeth also there is more work than the sanitary inspectors can get through. At the time of the cholera scare last year six temporary men were appointed, and it was found that there was enough work to engage these, and the regular staff for at least two years. The Vestry has, however, fallen back to the old humdrum way, and the inhabitants will reap the benefit of a penny wise pound foolish policy.

Mr. Percy Boulnois, city engineer of Liverpool, read a paper before the Sanitary Institute last week. "Is it really a sanitary measure," asked Mr. Boulnois, "to perpetuate crowded areas even under more healthy circumstances? Would it not be wiser to discourage this centralisation of the population into towns and cities, and endeavour on the other hand to provide suitable, self-contained, and more interesting habitations for the real working classes in the suburbs, leaving the 'submerged tenth' to be dealt with in municipal or State common lodging-houses, such as those in London and Glasgow?"

FOOD AND DRUGS ACT AMENDMENT BILL.

TEXT OF THE MEASURE.

The following is the text of the Bill to Amend the Sale of Food and Drugs Act, 1875, and the Margarine Act, 1887, introduced by Dr. Cameron into the House of Commons:—

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. The provisions of the Sale of Food and Drugs Act, 1875, and of any Act amending the same, shall apply to and include every wholesale trader or manufacturer of any article of food or drug who shall sell to the prejudice of the purchaser any article of food or drug which is not of the nature, substance, and quality of the article demanded by such purchaser; and the seventeenth section of the said Act shall be read as if the words "whether by wholesale or" were inserted between the words "on sale" and the words "by retail" in the said section.

2. The twenty-fifth section of the said Act shall be and is hereby amended by the deletion of the word "written" before the words "warranty to that effect," and every wholesale trader or manufacturer of any article of food or drug, or other person who in the course of trade shall sell to any person any article of food or drug, with intent that the same may be resold by retail in the state in which it is purchased from him, shall, unless he has in writing informed the purchaser to the contrary, be deemed, for the purposes of the said Act, to have given a warranty to the person purchasing from him that such article of food or drug is of the nature, substance, and quality demanded by such purchaser.

3. In any proceedings under the principal Act having reference to the sale of "margarine" as defined by the Margarine Act, 1887, it shall be a good defence to prove that the sale was made in conformity with the regulations of the said Margarine Act, 1887, and in the case of proceedings in Scotland under the said Margarine Act, the thirty-third section of the Food and Drugs Act, 1875, shall be held to be added to the sections twelve to twenty-eight inclusive incorporated in section twelve of that Act.

4. In determining whether an offence has been committed under section six of the principal Act, by selling to the prejudice of the purchaser coffee not adulterated otherwise than by the admixture of chicory, it shall be a good defence to prove that the seller delivered with or on such mixture a notice by a label distinctly and legibly written or printed, in the form given in the schedule to this Act, stating the proportions of coffee and chicory contained in such mixture.

5. Whereas it is desirable to interpret the law as to the proportion of water in butter which shall be deemed as constituting an offence in proceedings under the principal Act: be it enacted that the sale of butter containing more than _____ per centum by weight of water sold as butter shall be deemed to constitute a sale to the prejudice of the purchaser, unless such excess of water is intimated by the seller at the time of sale, and the onus of proving such intimation shall lie with the said seller.

6. This Act shall be read and construed with the Sale of Food and Drugs Act, 1875, and any Act amending the same.

7. This Act may be cited for any purposes as the Sale of Food and Drugs Act, 1875, Amendment Act, 1893.

SCHEDULE.

Coffee Mixture containing —

Coffee, four-fifths } or { three-fourths } or { one-half } or { one-fourth.
Chicory, one-fifth } or { one-fourth } or { one-half } or { three-fourths.

And so on, as the case may be, specifying in equal parts on each label the respective proportions of coffee and chicory contained in the mixture sold.

The Bill is backed by Mr. Channing, Dr. Farquharson, and Mr. Kearley.

REPORTS AND ANALYSES.

We have recently had submitted to us samples of the stout made by J. J. Murphy & Co., Cork, which is now being bottled in London and on sale in many of the best hotels and restaurants in the metropolis. It is a stout of excellent taste, and appears to be brewed carefully from good class materials. Messrs. Murphy & Co. adopt a very excellent method with their stout. They do not supply whatever bottlers ask for from them with barrels and labels, but bottle it themselves, at their own stores, and every bottle is capsuled to prevent its being tampered with, or being used for refilling with inferior, or mixed stout. The advantage of this is obvious to those who know the amount of fraud indulged in by bottlers everywhere. So crying has the scandal become of the substitution of inferior stouts, or the mixing of the same with the product of Messrs. Guinness that the Dublin House have to regularly refuse to supply labels to those detected in the practice, but those so discovered are, of course, few, in comparison with the offenders who are not found out. There is room therefore for bottled stout of uniform and unquestionable purity, and Mr. Alderman Horgan, Cork, and Mr. Joseph Nolan, who have vigorously pushed its sale amongst the London trade have already secured for it a large and increasing demand.

In his annual report recently issued, Mr. Horace Sworder, Medical Officer of Health for Luton, writing in regard to the operations under the Food and Drugs Act, says: "Twenty-six samples were submitted to the public analyst, including three of butter, nine of milk, and two of bread. Seven out of the twenty-six were reported to be adulterated, including four of milk, and one of butter. Proceedings were taken in the butter case, a conviction was obtained, and a fine of £2 17s. 6d., including costs, was imposed. In two of the milk cases, owing to the death of Dr. T. Redwood, proceedings were not taken against the offenders. In the other cases, the offenders were convicted and fined 52s. and 30s. respectively, including costs. In one instance, a purveyor of milk was convicted and fined £2 10s., including costs, for refusing to serve the inspector with milk for analysis. Seeing that milk forms, or ought to form, the staple food for so many infants and children, and that our infant mortality is high, and seeing also, as these analyses prove, that some of our milk vendors are not proof against the great temptation of adding largely to their profits by the addition of water to the milk, or of robbing it of some of its most nourishing properties, it behoves you gentlemen to see that very frequent samples are taken. It is to be hoped that your good intentions will not be frustrated by the imposition of fines of such a trifling nature as to encourage the continuance of these dishonest and cruel practices."

REAL MILK FINES AT LAST.

At Marlborough-street, on the 10th inst., Morris Evans, Windmill-street, St. James', was summoned by F. J. Strutt, Strand Board of Works Inspector, for selling milk adulterated with 26 per cent. of added water. The detection of this adulteration was clever, and may be commended to other food and drugs inspectors. He asserted that his milk had been previously tested in his shop, but his servant was found selling milk of a different quality in the Strand district. Two previous convictions were proven against him, and the result was that Mr. Newton read him a lecture upon his duty to his customers who support him, and inflicted a sensible fine of £15 and costs. Mr. Strutt is to be congratulated on thus protecting the public, and we hope other London magistrates will follow Mr. Newton's example.

ROTTEN MEAT FOR PAUPERS.

At the meeting of the St. George's, Hanover-square, Guardians, on the 8th inst., at Mount-street, Grosvenor-square, the clerk read a letter from a female inmate of the Fulham-road Workhouse complaining of the stinking condition of the meat supplied to the able-bodied women for their dinner on Sunday. Sir John Tilley (chairman of the visiting committee) admitted that the meat was bad, and that those who complained had something else substituted, and that the portions unfit for food were destroyed. Mr. Margrie (Westminster) asked who was responsible, at which there were loud cries of "Chair" and "Order," and apparently a desire to stifle discussion. Mr. Margrie persisted in his question, and ultimately Major Grimston explained that meat intended for Sunday use was frequently in hand the preceding Thursday, and the mild weather had somewhat tainted it.

ADULTERATION PROSECUTIONS.

MILK.

At the West Riding Police-court, Skipton, on the 11th inst., before Mr. J. Coulthurst, Mr. J. Slingsby, Colonel Robinson, and others, Stephen Newsholme was summoned for selling to Inspector A. Randerson, on February 10th, new milk which was not of the nature, substance, and quality demanded by the purchaser. Mr. W. Thompson, solicitor, Skipton, appeared to defend. Inspector Randerson stated that defendant was a farmer, residing at Halton East, and was under a contract with the Skipton Board of Guardians to supply them with good new milk for the use of the inmates at the workhouse at so much per gallon. On February 10th he (the inspector) was purchasing samples of food and drugs in Skipton town for analysis, and at about 8.50 a.m. he met the defendant at the workhouse gates, Skipton, and demanded a sample of milk for analysis (a pint), for which he paid 1½d. Acting in accordance with Section 14 of the Sale of Food and Drugs Act, 1875, he offered to divide the sample into three parts, but defendant refused to have it divided. He then sealed and labelled the sample in defendant's presence. On February 11th he took it along with other samples to the public analyst at Sheffield, and on February 24th he received the certificate produced, which was as follows:—"The sample had been deprived of a portion of its natural cream, or butter fat, by skimming or similar means. I estimate the deficiency at fully one-third." No change whatever had taken place to interfere with its analysis. Cross-examined by Mr. Thompson, the Inspector said he was not then prepared to say what the quality of milk was at different periods of the year; he was simply there to carry out the provisions of the Food and Drugs Acts. Joseph Smith, assistant to the inspector, corroborated the evidence of purchasing of the sample. Mr. John Hardacre, clerk in the offices of Mr. T. Brown, who is clerk to the guardians, produced the sealed and stamped contract between Newsholme and the Board of Guardians, which stated he was to supply good new milk at 8d. per gallon. Mr. Thompson, for the defence, said that defendant was a hard-working farmer, and that it was the practice amongst most farmers to mix old milk with new and sell it as new milk, also that there was no intention of fraud. He should therefore ask them, the magistrates, to dismiss the case. After some consultation, the chairman, Mr. Coulthurst, said that neither Mr. Thompson nor any man living would make the bench believe that new milk mixed with old was genuine new milk. This was a very bad and disgraceful case. Defendant would be fined £5 and £1 2s. 9d. costs.

At the Leeds City Police-court on the 10th inst., before Mr. Bruce, Esther Ann Smith, of 69, Sheepscar-street, Leeds, was summoned for selling to Inspector Walker, on February 15th, a sample of new milk which the borough analyst certified to contain 33 per cent. of added water. A fine of 20s., including costs, was inflicted. A second charge for selling another sample on February 18th, which was certified to contain 32 per cent. of added water, was withdrawn. His Worship thought the defendant was the victim of the wholesale dealer.

On the 8th inst., at the Liverpool Police-court, Stephen Mudd, 7, Back Roscommon-street, was fined 20s. and costs, for selling skim milk which contained seven parts of water to every part of the poorest milk.

Thomas Marshall, Harlow-street, was fined 40s. and costs, for selling new milk containing fourteen parts of added water.

On the 7th inst., James Galpin, dairyman, of St. Thomas, appeared before the Bench at the Woford Sessions, held at Exeter, on the charge of selling adulterated milk. Adulteration to the extent of 8 per cent. was proved, and defendant pleaded guilty. He was fined £1 0s. 6d.

At the Portsmouth Police-court, on the 28th ult., Walter Lemon, 39, was summoned by Inspector Hack under the Food and Drugs Act for selling a pint of new milk adulterated with nine per cent. of water. Inspector Hack purchased the milk from defendant in Stoke-road on the afternoon of the 7th ult., and the analysis of Dr. Angell showed that it was adulterated. Defendant, in the witness-box, produced a certificate from two London doctors, which showed that the sample was adulterated with four per cent. of water. Defendant was cautioned and discharged.

William Christopher pleaded guilty to a summons for selling milk with 21 per cent. of cream extracted, on the 7th ult. Inspector Hack proved this case also, and defendant was fined 10s. and the costs, 7s. 9d., which he paid.

At the Witham Petty Sessions on the 28th ult., William Newman, milkman, Witham, was charged with having sold one pint of milk at Witham on 3rd ult., as new milk which had been diluted with water. Defendant pleaded not guilty. Superintendent George Allen stated that on the day in question he purchased a pint of new milk of defendant's boy, who was hawking milk in the High-street, Witham, for which he paid three-halfpence. He divided the milk into three parts; one part he now produced, and one part he gave the boy. He corked and labelled them, and the same morning he took one to the public analyst, Mr. T. Pooley. He had since received a certificate of analysis stating that the milk contained seven parts of added water, and that at least one-fifth of the cream had been abstracted. Replying to a magistrate, witness stated that the boy was selling this as new milk. He added that the boy had just come from Mr. Wright's premises, another milk dealer. Defendant stated that the milk had been bought of Mr. Wright. To make sure that the milk was pure, he had bought a tester—he had bought milk all through the winter of Mr. Wright, and he had frequently tested

the milk and found it all right. He tested it on the morning in question, but found no water. George Hubbard, 12, who is in the employ of defendant, stated that he took his milk-can empty to Mr. Wright's on February 3rd, and bought 15 pints of milk. He subsequently sold one pint to Superintendent Allen. Defendant said he could call Mr. Wright, who supplied the milk. The Chairman said that he had made exactly the same defence on a previous occasion, when he was convicted. He would be fined 40s., with the costs, 9s. Defendant protested that he was innocent. He had to buy milk on certain occasions, and he could get it from no one excepting Mr. Wright. The Chairman explained to defendant that he had his remedy against Mr. Wright. He could have shielded himself by requiring a written certificate from him that the milk was pure.

At Garston County Magistrates Court, on the 8th inst., Charles Sutton, milk-dealer, Chapel-road, Garston, was fined 20s. and costs, for selling adulterated milk, the analysis showing that twelve parts of water had been added to every 100 parts of the poorest milk.

On the 3rd inst., William Hare, of Southwell-road, Lakenham, was summoned on the information of Mr. Joseph Brooks, the sanitary inspector, at the Norwich Police-court, for selling through his agent milk adulterated with 16 per cent. of added water, on 2nd ult. Mr. Brooks said he visited defendant's premises on the 2nd ult., and asked Mrs. Hare for a pint of milk. He told her he had purchased it for the purpose of having it analysed, and offered to divide the sample into three parts, and leave one with her. The offer was accepted, and he divided the milk and left one part with her. On the same day witness took one part of the milk to Mr. Crook, and on the 14th received his certificate, which stated that the milk was adulterated with 16 per cent. of water. Defendant called his wife as a witness, and she stated that she sold the milk as she bought it. She had half a gallon in the morning, and if she sold that she had two pints more in the evening. She denied that she had ever added any water to it. Nobody else had anything to do with the milk, which was obtained from her son, a milk seller. The magistrates said they believed defendant's statement that the milk was sold as it was received, but she must be responsible for the milk. They inflicted a fine of 1s.

George Sharpe, of Ber-street, was summoned for a similar offence on the same day. Inspector Brooks deposed to purchasing a pint of milk from Edith Sharpe. He divided it as in the last case, and left one part with her. He sent another part to Mr. Crook, who certified that it was adulterated with 20 per cent. of water. Defendant now stated that the milk had not been in the shop more than half-an-hour, and his daughter sold it just as she received it. Edith Sharpe, defendant's daughter, said the milk was in the same condition as when brought from the farm. In answer to Mr. Wild, witness said they asked for pure milk, and they expected it. It was not adulterated while it was in their possession. Defendant asserted that he bought the best milk. The magistrates inflicted a fine of 1s. and 7s. costs, and remarked that if any more cases were brought before them they would have to deal more stringently. The interests of the public must be protected.

On the 3rd inst., at the Sevenoaks Police-court, Henry Poore was summoned for selling adulterated milk at Wrotham on the 17th January. Mr. A. J. Ellis defended, and said defendant could not appear. Superintendent Henry Lane stated that on January 17th he purchased of defendant through his manager three half-pints of new milk for which he paid 2½d. Mr. Ellis before going further contended that the information in the summons was bad, as it alleged that the superintendent purchased of Poore, whereas he obtained the milk from the manager. It would be an injustice to Mr. Poore to convict him of an offence for which he was not answerable. The Bench over-ruled the objection, and Superintendent Lane, continuing his evidence, said defendant's manager got the milk from his cart. He submitted a sample of the milk to the public analyst (Mr. M. A. Adams), who certified that the milk was adulterated 27 per cent. Cross-examined: The man's name was Frost, but he did not know he had had a quarrel with defendant that day. Mr. Ellis, in defence, said defendant had carried on business in a large way for six years, and had never been summoned before. The man who sold the milk to the superintendent had had a quarrel with his master, who denied that he was a party to watering milk. It was also very difficult indeed for an analyst to say how much of the water in the milk was natural water, and how much had been added. The Chairman said it being his first offence, defendant would only be fined 40s. and costs.

At Stifford, Essex, Henry Lucy was summoned for damaging a quantity of milk, the property of Mr. Charles H. Read, on the 22nd February. Mr. Clinch appeared to prosecute. Defendant was in prosecutor's employ, and he was seen by police-constable Gross to add a quantity of water to the milk. Defendant pleaded guilty, and was fined 30s., 2s. 6d. damages, and 7s. 6d. costs.

At Worship-street Police-court, on the 9th inst., three persons, dealers in milk, were summoned before Mr. Bushby by the sanitary authority of St. Leonard, Shoreditch, for selling adulterated milk, the Vestry Clerk prosecuting. In the first instance, Elizabeth Thomas, of Leonard-street, Finsbury, pleaded that she sold the milk as it was delivered to her. She had since found out that it was made up of skim milk and "condensed" milk. Mr. Bushby told her she could protect herself by dealing only with those vendors who would give a guarantee of purity, and fined her £5. Frederick Uppendell, Soruton-street, Finsbury, who sold as milk at 4d. a quart an article which the analyst certified contained 15 per cent. added water, was fined £5 10s. William Jenkins, of Minster-street, Hoxton, was stated to have sold milk containing 17 per cent. of added water. Mr. Rendall Moore, for the defence, contended that though the sanitary

inspector, who had divided the sample purchased in the defendant's shop, had complied with the 14th section of the Act by stating the object of the purchase, the intention to send the milk to the public analyst, and had offered to divide, he had nevertheless failed to comply with the letter of the law, because he had divided without the offer being accepted. If the offer was not accepted it was the duty of the analyst to have divided the article. Mr. Bushby held the objection good, and dismissed the summons with £1 1s. costs.

At Bristol Police-court, on the 8th inst., Francis Coates, of 50, Merchant-street, was summoned for selling milk adulterated with not less than 8 per cent. of added water. Inspector Durbin gave evidence as to the purchase of the milk, and produced the certificate of the analyst. The defendant said he sold the milk in the same condition as he bought it. He was fined £1 and costs.

Mary Roach, of 1, Hanover-street, St. Paul's, who did not appear, was summoned for a similar offence. Inspector Durbin said in this case the certificate of the analyst showed that the milk was adulterated with 27 per cent. of added water. This was regarded as a very bad case, but Superintendent Cann said the defendant, a widow, was in very poor circumstances. She was fined 20s. and costs.

William Young, of St. Nicholas-road, was summoned for selling milk adulterated with not less than 25 per cent. of added water. Inspector Rawlings proved the case, and a fine of £5 and costs was imposed.

Harry Barry, of 102, Pennywell-road, for a like offence, was fined 20s. and costs. Inspector Hardy said the analyst certified that the milk contained 11 per cent. added water. The wife of the accused, who appeared for her husband, said she had not adulterated the milk. Superintendent Wookey said the man with whom the defendant dealt had been twice fined for selling adulterated milk. The Chairman said it was doubtless a hard case, but they could not impose a smaller penalty than that mentioned above.

William Britt, of 5, Mina-road, for a similar offence, was fined 20s. and costs, the added water amounting to 12 per cent.

John Cook, also of Mina-road, was ordered to pay 20s. for selling milk adulterated with 12 per cent. of added water. Inspector Hardy proved both these cases.

At Coventry, on the 10th inst., George Edward Wright, a milkman in the employ of the Callow Park Dairy Company, was summoned for having, on the 2nd February, sold milk adulterated with 8 per cent. of added water. Mr. L. Beard (assistant town clerk) appeared for the prosecution; and Mr. Masser defended. The fact was admitted, but Mr. Masser relied on the special defence of a written guarantee from Mr. J. Bostock, farmer, Baginton, that the milk was to be delivered pure and unadulterated, with all the cream on, and on proof that it was sold in exactly the same condition as when received, and said if the case were dismissed, proceedings would be instituted against the farmer. Mr. Beard urged that the protective clause of the Adulteration Act did not cover the defendant, he not being the purchaser of the milk. The Bench said they were of opinion that the warranty did not cover the defendant, and inflicted a fine of 10s. and costs; but at the same time said they would have preferred the prosecution being taken against Mr. G. H. Dowse, the proprietor of the Callow Park Dairy Company. Mr. Masser intimated that he should ask for a case for appeal.

SIR JOHN BRIDGE AND MILK ADULTERATION.

The Golden Grain Bread Company, possessors of many tea buffets, appeared at Bow-street on the 13th inst., before Sir John Bridge, charged with selling adulterated milk at their Strand establishment. The analyst, Mr. Cecil H. Cribb, B.Sc., F.I.C., stated in his certificate that the milk had at least six per cent. of added water, and that at least 20 per cent. of the cream had been abstracted. Sir John Bridge, who for some unknown reason sides with the milk adulterator, did not trouble the defendants to produce any proof that the certificate of Mr. Cribb was wrong. His remarks clearly showed that he did not know the difference between added water and cream abstraction, but believed the one the same thing as the other, and although the Act of Parliament gave him no option but to convict, there being no evidence whatever forthcoming that Mr. Cribb's certificate proving the adulteration was incorrect, he dismissed the case on the ground that he did not believe there had been abstraction of cream. There was no one in court more surprised at this wonderful manifestation of magisterial wisdom than the defendant's solicitor; and the case being such a flagrant instance of magisterial inability to administer the law, the Vestry will most probably apply for a case to be stated. Sir John evidently would be none the worse for a few weeks' instruction in an analyst's laboratory. He would there learn that the abstraction of cream and the addition of water are not one and the same thing; and if he were to take the trouble to read and understand the provisions of the Acts, he would benefit the public in his district, and save himself from ridicule.

At Bridgend Police-court, on the 4th inst., Mary Lewis, Bryncoch, was charged with selling milk adulterated with 20 per cent. of water. Acting-sergeant Button said that on February 8th he bought milk from the defendant's son at the Police-station, Aberkenfig. Witness asked for a pint of fresh milk, which was supplied to him. It was divided and sealed in the usual way, and the boy was told that the milk was to be analysed. Witness served the summons on defendant, who said she could not understand how it was, as the milk was sold direct as it came from the cows. In reply to Mr. Scale, who defended, witness said he had bought milk from the defendant for some time. He was told that the boy had bought some milk that morning, as they ran short. Superintendent Thomas produced the certificate of the county analyst (Dr. Morgan), which showed that the milk was adulterated to the extent of 10 per cent. added water. The milk was also deficient in butter to the extent of 20 per cent., which was probably caused by the milk being partially skimmed, or being

a mixture of whole and skimmed milk. Mr. Scale addressed the court for the defence, and said the milk had been sent out direct as it came from the cow, and that milk had to be purchased by the boy in order to supply all his customers. Referring to the analysis, Mr. Scale said the Stipendiary in the Rhondda had recently decided on a case in which a summons, similar to the present one, had been dismissed, remarking that the rainy season would have caused the milk to be watery to a certain extent, and would have accounted for the butter deficiency. Llewellyn Lewis, son of the defendant, said he saw his mother put the milk into the cans from the bucket. On the morning in question he bought three pints from another place, as he had not enough to supply all his customers. He did not put any water in the milk himself. The Chairman said the Bench were of opinion that there was no intention to defraud the public, but as defendant had bought milk which was adulterated she would have to bear the consequences, as she was responsible for selling it. The case would be dismissed on payment of the costs, which amounted to £1 6s. 9d.

At Leicester, on the 10th inst., Francis Manning, farmer, of Oadby, was fined £5 or a month's imprisonment, for selling milk to a retail dealer which contained fifty per cent. of water. Thomas H. Catlow, sanitary inspector, stated that he saw defendant delivering milk to a retail dealer, and took from him a sample which had been analysed and found to contain 30 per cent. of added water. Defendant said he did not add the water. He bought the milk from another man. Dr. Priestley, the public analyst, said although he certified 30 per cent. of added water, there certainly was not less than 50 per cent. The Chairman: Do you mean to say that this milk was half water? Dr. Priestley: Yes, sir. The Chairman said it was a shameful and most flagrant case. He did not know how children were to live if they had such milk. The Bench would not be doing their duty to the public if they fined the defendant less than £5, or a month's imprisonment.

At Barnsley, on the 15th inst., James Falstead, employed by the Farmers' Cleveland Dairies Co., Limited, was charged with selling to Mr. Thos. John Hall, Sanitary Inspector, Barnsley, on the 19th of February, a pint of milk, at Low Valley. The sample, on analysis by Mr. Allen, the County Analyst, showed 20 per cent. of added water. The magistrates fined him 40s. and costs.

BUTTER.

At the West Riding Police-court, Huddersfield, on Tuesday, 7th inst., before E. Armitage, J. N. Sykes, and J. F. Brigg, Ephraim Frankland Collinson, grocer's salesman, of Swallow-lane, Golcar, was charged, under an adjourned summons, with selling adulterated butter. Mr. W. Woodhead (from the office of Mr. Trevor C. Edwards, West Riding solicitor, Wakefield) appeared to prosecute on behalf of the West Riding County Council, and Mr. F. A. Reed (Messrs. Learoyd and Co.) represented the defendant. The facts of the case, which have been already given, and which were testified to by Mr. A. L. Bridge, a West Riding inspector of weights and measures, and an inspector under the Food and Drugs Act, were that on the 16th of January, he visited the shop kept by the defendant, which is the property of, and is worked by, the Working Men's Co-operative Society of Golcar. He was served with a pound of butter, for which he paid 1s. 2d., and after the usual preliminaries he handed a third of it to the defendant, and sent a second third to Mr. Allen, the West Riding analyst, at Sheffield, and produced the remaining third in court. He now produced the analyst's certificate, which showed that the sample contained "not less than 12 per cent. of fat other than butter," and 21 per cent. of water. The average, according to the analyst, was from 10 to 12 per cent. of water, and 16 per cent. was the maximum. In the analyst's opinion the sample was margarine. Mr. Allen, the West Riding analyst, who is also public analyst for the county of Derby, the city of Sheffield, and other places, and ex-president of the Society of Public Analysts, gave evidence as to the genuineness of his analysis, and described the tests to which he subjected the sample of butter sent to him, and the results which followed those tests. He was cross-examined at considerable length by Mr. Reed with reference to a series of experiments he made four years ago on behalf of the Danish Government, in order to show that the abnormal sample of butter which at that time was, by the assistance of the Danish Government, secured in that country, might possibly apply to this particular case, the figures, in both instances, being fairly near. Mr. Allen, however, insisted that this particular sample of butter was considerably worse than the Danish sample, although in the case of the latter every attempt was made to get it as bad as it possibly could be, consistent with no adulteration. Dr. Otto Hehner, ex-president of the Society of Public Analysts, public analyst for Nottinghamshire, West Sussex, the Isle of Wight, and a large number of boroughs, analyst for the Home and Foreign Produce Butter Exchange, and consulting analyst to the London Chamber of Commerce, gave evidence confirmatory of Mr. Allen's statement. In his cross-examination, Dr. Hehner said that he had a process of his own by which he could detect an addition of five per cent. of margarine in butter, but he declined to state what this test was. In the particular sample in question he had found quite 15 per cent. of margarine. Adulterated butter came from all parts of the world, but the chief "sophistication" of butter was done at Hamburg. He was very sorry to say that his experience during the last two years showed that margarine was introduced into Irish butter. Mr. Reed, in defence, argued that the result of the analysis in this case was so near the results in the Danish butter case that had been quoted that it was quite possible the sample was as pure as the Danish butter which Mr. Allen himself followed from the milking of the cow until it was turned out of the churn as butter. He asked the magistrates to

send the third sample which the inspector had produced in court that morning to Somerset House for analysis by the chemical referees appointed under the Act. He pointed out that the object of such a prosecution ought not to be to set one analyst against another, but to decide in the public interest whether an article was really adulterated or not. The magistrates having declined this application, Mr. Reed then took a technical objection, to the effect that by the analyst's certificate, the butter being shown to be margarine, proceedings ought to have been taken under the Margarine Act, which was a more recent Act than the Food and Drugs Act, and which, so far as margarine was concerned, superseded the previous Act. He further contended that under the Margarine Act any addition might be considered as converting butter into margarine, and he argued that the addition of water was in this way brought under the Margarine Act, so that his objection applied to both of the charges of adulteration which he had to meet in that court. Under the Margarine Act he had to prove that the butter was invoiced to the defendant as butter, that he had no reason to believe it other than as described upon the invoice, and that he sold it in the bona fide belief that it was butter, and without altering or adding to the article when in his custody. For this purpose Mr. Reed called Mr. Collinson, who gave evidence to that effect, and added that he did not, as stated by the inspector, demur to receive one-third of the article when told that it was for analysis. Mr. Collinson also added that in past years Irish butters sold very extensively in this district, but that lately they had been to some extent superseded by the better qualities of Danish. After a lengthy hearing and retiring for five minutes to consider their verdict, the Chairman (Mr. E. Armitage) announced that the magistrates had decided that the purchaser did not get an article of the nature, substance, or quality of that for which he asked, and they inflicted a penalty of £10 and costs. It was agreed to fix the costs of Dr. Hehner, who had been obliged to come from London the previous night at £5 5s., and the costs of the whole reached the sum of £7 18s. 6d., making the total penalty with costs, £17 18s. 6d. Mr. Reed asked the Bench to state specifically the grounds for their decision in order that he might appeal, but Mr. Sykes (the Magistrates' Clerk) held that Mr. Reed had received from the magistrates' ruling quite sufficient for his purpose.

At Halstead, on the 6th inst., Selina Amelia Rayner was charged with selling a substance purporting to be butter, but which was found to contain other substances. Mr. Asher Prior appeared to defend, and asked the bench to allow the charge to be withdrawn. He said the defendant kept a small shop in New-street, and there was no question she disposed of the butter in the same state as she received it, but without any warrant as to its purity. Directly she received the summons she placed herself in communication with Messrs. Seymour, who prided themselves on selling nothing but pure and genuine articles. That firm bought the butter of Messrs. Crew, Wigery, and Co., of 36, Snow-hill, West Smithfield, London, with whom they communicated, and they said the butter was guaranteed to them as perfectly pure butter. They had it analysed, and the certificate of Mr. G. R. Gregory clashed with that of the county analyst. As it would cost a great deal to bring all these people down from London, he would suggest that Supt. Elsey, with the consent of the bench, withdraw the charge on his (Mr. Prior's) client paying the expenses. In reply to the Chairman, Supt. Elsey said he was in the hands of the bench. The Chairman said the bench felt Mrs. Rayner was perfectly innocent of the charge, but his opinion was that they must not lay too much stress upon the guarantees unless the circumstances warranted it. They would allow the charge to be withdrawn. At the same time, it was of the greatest importance that the Acts to prevent adulteration should be carried out. It seemed another case of going in for cheapness. His opinion was that the price would not allow the goods to be genuine.

MARGARINE.

At the Seaham Harbour Petty Sessions, on the 3rd inst., James W. Ellemor, grocer, for whom Mr. Crow appeared, pleaded guilty to a technical offence in selling margarine in a wrapper not so marked. Fined £2 and costs.

At Wolverhampton, on the 9th inst., George Jeavons, grocer, of Ettingshall-lane, Priestfield, was fined £3 and costs for selling margarine without a proper wrapper. There were two other charges against the defendant for exposing the margarine for sale without having it labelled, but these were withdrawn on payment of costs. The fine and costs amounted to £4 17s. 6d. The prosecution was instituted by Mr. J. E. Morris, inspector under the Food and Drugs Act, and Mr. T. Dallow defended.

LARD.

At the Seaham Harbour Petty Sessions on the 3rd inst., William W. Revelly, grocer, was charged under the Food and Drugs Act with selling impure lard. Mr. B. S. Elder, chief inspector under the Adulteration Act, prosecuted. Mr. A. T. Crow defended, and put in a plea of guilty. Mr. Elder, under the circumstances, called no evidence, but put in the certificate of Mr. Stock, county analyst, Darlington, as evidence. The analyst's certificate stated that the sample of lard purchased from the defendant contained 25 per cent. of beef fat. Mr. Crow submitted that had his client sold the lard as a compound they would not have erred, but unfortunately they sold it as lard. The lard had been bought from a wholesale firm, and the top price paid for it. It was not the fault of the defendant that the lard was adulterated. He was a respectable tradesman. It was the makers and the wholesale people at Liverpool who were responsible. Mr. Crow also pointed out that beef fat or stearine was not an adulteration of an unhealthy character like cotton seed oil or linseed

oil. This, he hoped, would induce the Bench to deal more leniently with defendant than otherwise. Mr. Elder, in reply, stated that lard did not require any admixture of even stearine. He pressed for a fine sufficient to cover the gravity of the offence, and alleged that the wholesale traders concealed themselves behind the retail dealer, and there was reason to believe that in some instances the first-named paid the fines. Mr. Crow wished that Mr. Elder was at Liverpool. If so, the energy which he would display would soon stop the sending out of the kind of lard complained of. The Bench said they were satisfied that defendant did not sell the lard knowing it to be adulterated. But it was adulterated, and this made him responsible according to law. A fine of £2 and costs was inflicted.

John G. Smith, grocer, was charged with a like offence under similar circumstances. Mr. Crow again defended, and advanced the same arguments in this case as in the last, and a fine of £2 and costs was imposed.

CHEESE.

At the Seaham Harbour Petty Sessions, on the 3rd inst., Jabez A. Purdy, grocer, was charged with selling to George Wilson half a pound of cheese which on analysis was found to contain 20 per cent. of foreign fat or margarine. Defendant pleaded guilty, and said that he sold the cheese as he bought it from a respectable wholesale trading firm. The Bench acquitted defendant of any knowledge of the adulteration, but the responsibility was there, and he would have to pay a fine of £2 and costs.

COFFEE.

At the Seaham Harbour Petty Sessions, on the 3rd inst., Francis Gibson, manager of the Co-operative Society at Seaham Harbour, was charged with selling to George Wilson, assistant to Mr. Elder, one half-pound of a mixture as coffee, which was afterwards found to be chicory and coffee. Mr. Burmite, of Sunderland, appeared to defend. A plea of not guilty was made. Witness stated that he went to the grocery department of the Seaham Harbour store, and asked for half-a-pound of coffee. A young man served him. Witness paid 8d. for what he purchased. He then told the assistant who had served him that he intended sending the "coffee" for analysis. Another young man then came up whilst he was dividing the mixture into three parts, and said that it was a mixture of chicory and coffee. Defendant also came, and he said that witness must understand that he was buying chicory and coffee. Witness heard the defendant ask the first young man if he had sold the mixture as coffee, and the reply was "Yes." Mr. Burmite cross-examined as to the printing, "This is sold as a mixture of chicory and coffee," which was on the wrapper. Witness said that he did not see this until he was dividing the mixture into parts. Witness was not told the mixture was chicory and coffee until after the purchase was made. Mr. Elder produced the analyst's certificate, which showed that the mixture was composed of 57 parts chicory and 43 parts coffee. In reply to Mr. Elder, the witness, Wilson, said that he had bought pure coffee at several places in the county of Durham at 1s. 4d., 1s. 6d., and 1s. 8d. per pound. He had plenty of time to leave the shop after he purchased the coffee. Mr. Burmite's contention, in addressing the Bench, was that no fraud had been proved or committed. The mixture was handed to the purchaser in a wrapper expressly stating that it was chicory and coffee. There had been several cases of a like character where the magistrates had refused to convict. Defendant was examined, and said that as soon as he knew of witness buying in the shop he went to him and said, "You must understand that this is sold as a mixture of chicory and coffee." Witness did ask the assistant if he had sold the mixture as coffee, and the reply was that it was sold as "mixed coffee." This was an understood term in the trade. In reply to Mr. Elder, defendant admitted that 57 parts chicory was more than intended. The leading counterman did the mixing. Witness generally allowed half-and-half. Coffee in the berry was 1s. 5d. per pound, and chicory was 4d. per pound. In giving their decision the Bench thought a fraud had been committed. Where a mixture such as that under notice was sold, it was to be expected that coffee should be the predominating element. A fine of £5 and costs was ordered to be paid.

WHISKY.

On the 28th ult., at the Southsea Police-court, Henry Fox, licensed victualler, of Alverstoke, was summoned for selling half-a-pint of whisky that was below proof. Detective-Inspector Hack stated that he purchased the whisky from the defendant's wife. Hack explained to her who he was, and stated that the liquor would be analysed. Dr. Angell, county analyst, certified that the whisky was 27.41 degrees under proof, being a mixture of 96.7 of whisky and 3.3 of water. The defendant's explanation was that the spirit had lost its strength. He was ordered to pay the costs, 8s. 3d.

On the 28th ult., at the Portsmouth Police-court, Henry Fox was summoned, on the information of Detective-inspector Walter Hack, for selling half-a-pint of whisky not of the nature and substance demanded. The inspector stated that he visited defendant's house at Alverstoke on the 30th January, and asked for three-pennyworth of whisky. This was supplied by defendant's wife, and witness then asked for half-a-pint to be put in a bottle. Defendant's wife went to draw the whisky from another vessel, but witness asked to be served from the one from which the first lot was taken. This was complied with, and then witness said he was an inspector under the Food and Drugs Act, and divided the whisky in the customary manner. Dr. Angell's (the public analyst) analysis of the whisky showed that it was 27.41 degrees under proof, and that it was a mixture of 96.7 parts of whisky and 3.3 parts of water. Defendant said he had been in his house close on ten years, and thought the spirit had "lost its strength." He was ordered to pay the costs, 9s. 10d.

RUM.

At Ormskirk Sessions, on the 6th inst., Thomas Singleton, King's Arms, Haskayne, was charged with selling rum in which was an excess of water on January 20. Sergeant Carson said he purchased a pint of rum at the defendant's house, which was submitted to Dr. Campbell Brown for analysis. Superintendent Jervis handed in a letter from Dr. Brown stating that the rum contained 2½ per cent. excess of water, and was 27½ per cent. under proof. Defendant said he had had the rum in the house for some time, but had not tested it until the officer had bought the sample. He had dealt with the firm from which he bought the rum for many years. The case was dismissed on payment of costs.

GIN.

At the Sevenoaks Police-court on 3rd inst., William Ovenden was summoned for selling adulterated gin at Wrotham on January 16th. Superintendent Lane said the public analyst's certificate showed that the gin was adulterated 2.24 degrees under the legal limit. Defendant, in defence, said the gin was in a new cask, and probably had evaporated. He was not convicted, but ordered to pay the costs of the proceedings.

MAGISTERIAL ABSURDITIES.

All agree that an enquiry into the working of the Food and Drugs Acts is necessary. It is not a pleasant thing to be confronted with the fact that an enquiry into the mental condition of magistrates, who, to their country's injury, administer the Acts appears equally necessary. Croydon seems blessed with queer magistrates. Its late Mayor waits in prison his trial for fraud of the most heartless kind. Another of its worthies figures in the "Hue and Cry," "aged fifty, very corpulent, short neck, legs seeming too weak for his body, fat, flabby face, thin straggling whiskers and beard." These awful examples of participation in or encouraging wrong doing, ought to have aroused Croydon Dogberries to a just appreciation of the necessity for keeping a keen eye on fraud wherever met. But do they? The following cases shall answer the query:—

Jabez White, a dairyman, was summoned by the Croydon Rural Sanitary authority for selling milk which was not of the nature and quality required. Mr. Edridge appeared for the Authority, and Mr. Dennis for the defendant. Samuel Brown, the inspector of food and drugs under the Authority, said he took a sample of the defendant's milk from a carrier in his employ. The analyst's certificate showed that the milk contained 11 per cent. of added water, and was 90 per cent. deficient in butter fat. Witness paid 1d. for the pint of milk. George Platt, who purchased the milk of Boyd, said he was calling "pure country milk, 1d. a pint." The barrow was marked "Devonshire dairy." William Simmins, a dairyman, swore that he also heard Boyd calling "pure country milk." The Bench considered there was no evidence connecting White with the matter, and dismissed the summons.

Martha Hawkins appeared to two summonses charging her with selling margarine, which was not so labelled, and also with selling butter adulterated with 84 per cent. of foreign fats; and Lucy Eastland, of Woodmansterne, was also summoned for selling adulterated butter. Mr. Streeter appeared and pleaded guilty, and said the mistake occurred at the wholesale dealers, Messrs. Coatman, by whom he was now instructed to appear and state the facts, accepting the full responsibility. It appeared that the defendants ordered butter, but by some error at the wholesale establishment, margarine was sent instead. It was due to the carelessness of an assistant temporarily engaged during the illness of one of the sons of the firm, and who at the time was under notice to leave. The defendants were, therefore, not to blame in any way, and Messrs. Coatman were prepared to pay the penalty, feeling that they were the ones really at fault. Mr. Robert Coatman was called, and confirmed Mr. Streeter's statements, and under the circumstances the Bench imposed a fine of 20s. and 9s. costs in each case, expressing an opinion that defendants were not intentionally defrauding the public.

How can it be expected that local authorities will go to the expense of enforcing Adulteration Acts when magistrates exhibit such scandalous inappreciation of their duties as is evidenced in this case. Such ignorant decisions disgrace the bench and make the law a farce.

REFUSING TO SELL A SAMPLE.

At Gosport, on the 28th ult., Frederick James Lemon was summoned by Inspector Hack for unlawfully refusing to sell him one pint of new milk on application, and on the tender of the price. Mr. Hack stated that on the 7th February he saw defendant at three o'clock in the afternoon in Stoke-road, delivering milk. He asked for a pint to be put in a jug, but defendant would not supply him, as he said it was milk that had been purchased by him, and he could not rely on it. "But," continued the defendant, "if you will come down to my house I will supply you there." Witness told him he was liable to be summoned, and defendant said he didn't care. Constable Adams corroborated. Defendant protested that he had no measures with him at the time. He had been twice previously convicted, and was told that he had subjected himself to a penalty of £10. A fine of 10s. and 7s. costs was inflicted.

ALUM IN EGG POWDER.

At the Liverpool City Police-court, on the 8th inst., before Mr. Stewart, John Parry, carrying on business at 138, Richmond-row, was summoned under the Sale of Food and Drugs Act for having sold egg powder not of the nature and substance demanded by the purchaser. Mr. Moss prosecuted, and Mr. Mulholland appeared for the defence. The evidence showed that a youth in the employ of the Corporation was sent by Inspector Baker to the defendant's shop to buy a dozen "Favourite" egg powders. In the shop the youth accepted a small box of "Excelsior" egg powders in place, and he handed it to Inspector Baker at the shop door.

Mr. Moss said that when the public bought egg powders they thought they were getting some kind of concentrated essence of egg, or ingredient similar to it. The analysis showed that the powder contained 40½ per cent. of alum, the remainder consisting of ground rice, carbonate of soda, and colouring matter. It was unwholesome, and contained no egg.

Dr. Hope said the unwholesomeness was owing to the presence of the alum. He had received complaints against the powder.

In reply to Mr. Mulholland, witness said there were egg powders containing no alum.

For the defence, Mr. Mulholland contended that the Act of Parliament had not been complied with, inasmuch as the powder had been taken out by the youth to the door and handed to Inspector Baker, who returned with it to the shop and offered to divide it. The Act said that the person who made the purchase should not take it away from the shop, but offer to divide it inside, and not give it to a second person.

Mr. Stewart held that the Act of Parliament had been complied with, as the evidence showed that the youth did not leave the shop.

Mr. Mulholland further contended that the youth got what he asked for—egg powder, and egg powder of a well-known brand. The brand had been in the market for thirty-five years. Egg powder meant that it would do as well as eggs.

Mr. Stewart said he did not think that the word "egg" was of a misleading nature in this case. He did not think that anyone buying this powder was of opinion that eggs were in it. He believed the meaning was that the powder would produce more cheaply the results produced by eggs.

Mr. Moss: The prosecution are perfectly satisfied so long as it goes forth to the public that these powders contain alum.

Mr. Mulholland: We have no objection to the public knowing everything about it. (Laughter.)

The summons was dismissed.

A second summons against the "Favourite" was withdrawn.

THE ADULTERATION OF CHEESE.

At the last meeting of the Cheshire County Council, Mr. Rigby called attention to the fact that at a recent meeting of the County Council a deputation was appointed to wait upon the Government to try, if possible, to prevent the continued adulteration of cheese. The adulteration of butter was coming to the front, and was being made in great quantities, and one of the greatest difficulties before those who were bringing the Bill into Parliament was to get some method of having it made in such a way as to be different to all other butter. A difference in colour had been suggested. There were difficulties in the way of this, and if a suggestion could be made that would be effectual and yet would not place the dealers in the article at too great a disadvantage, it would be a good thing. The resolution which had already been passed was that the word "caseine" should be placed in letters not less than three-quarters of an inch square on the substance when exposed for sale, and that the manufacturers of the same should be registered.

Mr. McCracken asked if it would not be sufficient if the provisions of an Act similar to the Margarine Act were applied to the article. They could scarcely expect it not to be coloured.

Mr. Davies moved that a resolution similar to the one moved by Colonel Dickson, asking that a Government measure should be applied to every person dealing in cheese which contains foreign fat or an excessive proportion of water to mark the same with letters indicating the fact, and also that the manufacturers of the same should be registered. This was carried, and a vote of thanks to the chairman concluded the business.

POISONOUS NOSTRUMS IN MASSACHUSETTS.

According to the *Boston Medical and Surgical Journal*, a bill has been introduced in the Massachusetts Legislature, dealing with proprietary medicines containing poison. It is proposed that such medicines should be labelled with the name, quantity, and antidote of the contained poison. The bill has been argued in committee, and our contemporary is of opinion that its opponents are too numerous to render its passage probable.

WEDNESDAY'S LONDON PRODUCE MARKETS.

CORN.—The attendance at Mark-lane to-day was thin, and only a small business done at Monday's rates. For wheat there was very little inquiry, and sales were extremely limited, prices showing no material change. Barley quiet and unaltered in value. Maize slow, at former rates. Oats dull. Flour quiet. Beans and peas unaltered. Arrivals this week:—English and Scotch: Barley, 540. Foreign: Wheat, 23,640; barley, 15,080; oats, 11,450; peas, 1,840; beans, 1,600; maize, 12,280; flour, sacks, 25,740. Cargo market depressed owing to decline in America. La Plata wheat, March-April sailor, reported sold at 26s. net. Americans inactive. Indians dull, few sellers. Hard Kansas on passage sold 26s 6d; and hard Manitoba, May-June, 29s (parcels). No. 2 club, April-June, sold 29s 3d. Prices generally are 1½d to 3d lower since yesterday, except for very fine wheats. Maize dull, distant being about 1½d lower. Danubian loading sold, 19s 6d for Galatz-Foxanian shipping or shipped; 19s 10½d is the best bid. Barley very quiet. Nicolaieff loading sold yesterday at 15s 3d; May-June Azoff sellers, at 15s 3d; buyers at 3d less.

SUGAR.—Refined quiet, and only a moderate trade done. The larger supplies of pieces met a slow sale at late rates. Crystal and stoved goods unchanged. Foreign refined quiet. French crystals No. 3, 17s c. f. and i. In cubes and granulated little doing. Cane descriptions quiet and unchanged. Tate's cubes, firsts, sell at 21s; seconds, 20s; crushed, firsts, 18s 9d; Liverpool crystals, firsts, 19s 6d; small, 19s 3d; seconds, 18s 9d; granulated, 18s 3d; Martineau's cubes, firsts, 20s 6d; seconds, 19s; titlers, 19s 6d; pulverised, 19s 3d; chips, 18s 9d; granulated, 18s 9d per cwt. Beet opened quiet, with steady sellers of March at 14s 4½d, April done at 12s 4½d; May 14s 6d buyers. London Produce Clearing House quotations of beet: First call: March, 14s 3½d; April, 14s 5½d; May, 14s 6½d; June, 14s 8½d; July, 14s 9d; August, 14s 10½d; September, 14s 6d; October, 13s 3d; November, 13s; December, 13s; October-December, 13s 0½d; November-December, 13s. Second call: March, 14s 3½d; April, 14s 5½d; May, 14s 6½d; June, 14s 8½d; July, 14s 9½d; August, 14s 10½d; September, 14s 6d; October, 13s 3d; November, 13s; December, 13s; October-December, 13s 1½d; November-December, 13s 0½d per cwt. Sales registered, 14,500 bags.

TEA.—The market remains without material change. Indian and Ceylon teas for "price" meet a fair demand at previous rates, but other kinds show weakness. Futures irregular. London Produce Clearing House quotations of good common China Congou:—March, 6 7-16d; April, 6 7-16d; May, 6 7-16d; June, 6 6-16d; July, 6d; August, 5 9-16d; September, 5 7-16d; October, 5 6-16d; November, 5 5-16d; December, 5 4-16d per lb. Sales registered, 1,000 half-chests. Fair whole-leaf Indian:—March, 8 6-16d; April, 8 6-16d; May, 8 5-16d; June, 8 2-16d; July, 8d; August, 7 15-16d; September, 7 12-16d; October, 7 9-16d; November, 7 2-16d; December, 7 2-16d per lb. Sales registered, 200 chests.

COFFEE.—At the auctions to-day desirable qualities realised former prices. 35 casks, 10 tierces, 13 barrels, 33 bags plantation Ceylon sold at 112s 6d to 119s 6d; Small, &c., 103s 6d to 107s 6d; peas, 131s to 137s 6d. 47 cases, 708 bags East Indian sold at 103s to 109; small, 99s 6d to 102s; peas, 118s 6d to 122 6d. 40 bags, 10 barrels Jamaica sold at 96s 6d to 100s 6d; peas, 103s to 106s 6d. 40 bags Java sold at 96s to 99s; peas, 105s. 362 bags Ccsta Rica sold at 99s 6d to 105s 6d. 61 bags New Granada taken out. Futures steady. Rio, May, 79s 3d; September, 78s 3d; December, 77s 6d to 77s. Closing without material alteration. New York opened unchanged to ten points down. Havre, March, 105½f.; May, 102f.; Hamburg, March, 83½m.; May, 81m.; Amsterdam, 54½c. London Produce Clearing House quotations of fair Channel Rio:—First call: March, 81s 3d; April, 80s; May, 79s 3d; June, 79s 3d; July, 78s 9d; August, 78s 9d; September, 78s 3d; October, 78s 3d; November, 78s 3d; December, 77s 6d; January, 77s. Second call: March, 81s 6d; April, 80s 3d; May, 79s 6d; June, 79s 6d; July, 78s 9d; August, 78s 9d; September, 78s 3d; October, 78s 3d; November, 78s 3d; December, 77s; January, 76s 9d per cwt. Sales registered, 5,000 bags.

SPICES.—The auctions to-day went with a quiet tone, and a rather large proportion of the supplies offered were bought in. Pimento, partly sold, 3d to 3½d; Penang cloves at 1s 0½d to 1s 1½d; Zanzibar chiefly taken out. 30 balas chillies bought in, 55s; 100 bags Sierra Leone taken out. 19 barrels capsicums sold 23s to 25s. 120 boxes Singapore nutmegs, mostly sold, 70s at 2s 6d; 80s at 2s 2d; 91s at 1s 1½d; 112s at 1s 9d to 1s 10d, smaller at 1s 3d to 1s 5d; 12 packages Penang bought in, 65s at 3s 3d, 80s at 2s 6d; 2 boxes Bombay, 112s sold 1s 1½d; 3 casks Bombay were bought in at 1s 10d; Singapore white pepper, mostly sold 4½d to 6d; Penang sold without reserve at 3½d to 3½d; Lambong black bought in. 60 bags 10 cases Cochín ginger, one lot sold 66s, remainder taken in 68s to 78. 130 St. Vincent arrowroot, small, part sold, 3½d to 4½d. 1,475 Penang flake tapioca, a few lots sold, 1½d; 735 bags seed pearl bought in at 12s to 12s 6d; 709 bags medium small part sold, 14s; 193 bags bullet bought in, 14s 6d. 1,433 bags small grain sago, partly sold, 12s 6d. 1,588 bags Sarawak, flour, taken out, part 10s 6d per cwt.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT-COFFEE COMPANY.

(Proprietors, KRIKORIAN BROS.)

MONUMENT BUILDINGS, LONDON, E.C.

BUYERS of Carbolic Powder are advised to have their supplies carefully tested, as very low grades are frequently substituted for, and sold as, 15% quality.

CALVERT'S CARBOLIC POWDER

Is GUARANTEED to contain 15% of full strength CARBOLIC and CRESYLIC ACIDS, and prices for same will be quoted to any applicant naming the quantity required.

F. C. CALVERT & CO., Manchester,

Have been awarded 60 Gold and Silver Medals, and Diplomas for the superior excellence of their preparations, in most cases after careful trial against other Disinfectants exhibited.

The Chemists', Druggists' and Allied Trades EXHIBITION,

TO BE HELD AT

THE ROYAL AGRICULTURAL HALL, LONDON,

APRIL 22, 24, 25, 26, 27, 28, 29, 1893.

Manufacturing Chemistry. Chemical Industries. Pharmaceutical Preparations. Surgical Instruments. Hospital and Ambulance Practice.

CHEAP TRAINS WILL RUN FROM ALL PARTS.

(For further particulars see handbills).

Exhibition Offices: 2, NEWCASTLE STREET, STRAND, LONDON, W.C.

JOHN BLACK, Secretary.

Bird's Baking Powder,

Bird's Concentrated Egg Powder,

Bird's Custard Powder,

Bird's Blancmange Powder,

are all guaranteed absolutely pure and wholesome, and free from any injurious ingredient whatever.

MEAT POISONING.

Edward Elliott, a milkman, took home to 25, Carlisle-street, Battersea, on the 18th, 5lbs. of pork, which he said he had bought at sixpence a pound. His wife baked the pork in the oven on Sunday morning, together with some sage and onions, broccoli, and potatoes, and Mrs. Elliott, her husband, and their child, aged three years, partook of the meal at dinner and supper. At those times they noticed nothing unusual with the meat, but on the following morning they all three became ill. Mrs. Elliott and her child recovered after a violent attack of diarrhoea, but her husband had to be taken to the Westminster Hospital, where he died on Tuesday. At the inquest, Mr. George Norman, house physician, said there was a probability that death was accelerated by poisoning. The Coroner said that no satisfactory opinion could be formed without an analysis of the stomach, and after communication with the Home Office an analysis had been ordered to be made by Dr. Stevenson, of Guy's Hospital. Other inquiries would have to be made to ascertain from where the pork originally came. The inquiry was adjourned for a month.

Food, Drugs and Drink, —THE— PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, MARCH 25 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

DR. CAMERON'S BILL AND COFFEE.

We see that many Grocers' Associations are passing resolutions in favour of Dr. Cameron's ridiculous method of amending the Sale of Food and Drug's Acts, and that as usual trade journals written in the interests of manufacturers who thrive by adulteration (for which retail grocers now receive punishment), are supporting the Bill. It is a great injustice to the grocers that some papers that claim to represent them are so dishonest and unprincipled as they are. Their editors like, Hosea Biglow's editor

"Scent that which pays them best, an' then
Go into it baldheaded,"

and accordingly write advice to grocers that is not only an insult to honest traders, but, if followed, would make the lot of the grocer far worse than it now is. We dealt in our last issue with the wretched Bill in so far as its warranty clause and butter clause were concerned. We now ask our readers to look to the effect of its coffee and chicory clauses. It is proposed that coffee mixtures shall be labelled:—

Coffee Mixture containing—

Coffee, four-fifths } or { three-fourths } or { one-half } or { one-fourth.
Chicory, one-fifth } or { one-fourth } or { one-half } or { three-fourths.

And so on, as the case may be, specifying in equal parts on each label the respective proportions of coffee and chicory contained in the mixture sold.

We do not know if it ever dawned upon the short-sighted persons who drafted this Bill what would be the practical effect of such a clause. By it the grocer is bound to supply the mixture in the precise proportions given on the label, i.e., his three-fourths coffee, and one-fourth chicory mixture would have to contain exactly 75 per cent. coffee and 25 per cent. chicory. If it contained a percentage more of chicory, the vendor would be liable to prosecution, were analysis to reveal the presence of the slightest amount over the declaration on the label. Even supposing that by the aid of the most accurately adjusted balances the exact percentages are present in the bulk, does any one, but the amateur legislators who drafted the measure, believe that the grocer could so accurately and mathematically mix the coffee and chicory that every package would contain a substance having precisely the proclaimed percentage? Would not the packages be more likely to vary to the extent of two to five per cent. or more over or under the respective proportions? Undoubtedly they would, as a moments reflection will show our readers. What then ought grocers to think of this measure, and of their guides in trade associations, and in the so-called trade papers? They hail it as a first-class Bill, when, as a matter of fact, it would prove more vexatious, and render the grocer more liable to punishment than the existing Act does, for any percentage of chicory, however low, over the exact quantity stated on the label, would be adulteration. We object to the Parliamentary apologists for adulterating manufacturers running the heads of grocers into such a noose, under the guise of disinterested philanthropy.

MORE GRAVE MISTAKES BY SOMERSET HOUSE CHEMISTS.

THE REVENUE DEFRAUDED OF LARGE SUMS OF MONEY.

In the House of Commons on Tuesday last, Mr. Egerton asked the Chancellor of the Exchequer whether Dr. Bell and Mr. Bannister, the chief and assistant chemists at Somerset House, had resigned; whether it was true that the post of chief chemist at Somerset House had been offered to Professor W. Noel Hartley, and what his qualification was as an analytical chemist; and, whether he would, before filling up the appointment, consider the advisability of appointing a person who had had practical experience in analytical chemistry. This question was supplemented by Mr. Hanbury with a startling and detailed inquiry as to whether these chemists had not failed to detect a very large fraud upon the Customs in connection with tobacco, and whether the frauds were not detected by the Customs chemists, who were not generally expected to analyse articles passed as genuine by the Inland Revenue officials? The Chancellor of the Exchequer, almost angrily, refused to answer the last question, of which no notice had been given. As to Mr. Egerton, his answer was that neither Dr. Bell nor Mr. Bannister had resigned, and that the post referred to had not been offered to Professor Hartley. Mr. Egerton is so valuable, conscientious, and really patriotic a member of the House of Commons, that we are sorry Sir William Harcourt should make so ambiguous an answer, the more so as the question by Mr. Egerton was founded on the following paragraph from *The Chemical Trade Journal*, March 18th:—

"SOMERSET HOUSE LABORATORY.—We have it on very good authority that a very considerable change will shortly be made in the personnel of this laboratory. It is believed that Dr. James Bell will soon resign the post of chief chemist to the Department, and it is also rumoured that the superintendence of this laboratory has been offered to Prof. W. Noel Hartley, of Dublin. Should this prove to be true we may possibly see a great improvement in the conduct of this Government laboratory."

It will be observed that *The Chemical Trade Journal* did not say that Dr. Bell and Mr. Richard Bannister had resigned, but that they are soon likely to do. Mr. Egerton's question was therefore somewhat unhappily worded, and gave Sir William Harcourt an opportunity for one of those ingenious replies dear to the clever minister. We confess, however, that we would rather have seen the Chancellor of the Exchequer take the House of Commons a little into his confidence, the more so as Mr. Hanbury's question—the full truth of which cannot but be fully known to Sir William Harcourt—shows how necessary it is that in the public interest competent analysts should be appointed to that laboratory in place of those now occupying the positions of principal and deputy principal chemists. Apart entirely from the question of national pride which must arouse in English scientists a feeling of intense annoyance that such sorry bungling should pass as the best English chemists are capable of, there is the one of the protection of the national pocket. Somerset House pseudo chemists, who by their ignorance and incapacity permit a not very clever gang of swindlers to defraud the revenue of more thousands than Commissioners or Chancellor of the Exchequer would perhaps like to admit cannot surely be retained in positions for which they have shown such persistent incompetence. We have before proved that the Somerset House chemists cannot analyse coffee, milk, and butter, but we allowed that in their congenial occupation of gin, beer, or snuff testing, they might be less incapable than in other analysis. When we find however, that they are not even competent to accurately analyse articles in which accuracy is imperative for the protection of the revenue from dishonesty, then their position becomes at once absurd, insulting to science, and dangerous to the country. We do not give these further proofs to our readers without having satisfied ourselves that they are absolutely true. As all are aware, the Customs regulations compel the payment of duty on the full weight of all tobacco leaf as imported, but as a considerable portion of ribs, unusable leaves cannot be manufactured into tobacco, this portion called "offal," has a special regulation applied to it. The manufacturer is allowed a "drawback" of 3s. 3d. per pound on all such "offal" if ground into snuff, and delivered to customers, but before refunding the 3s. 3d. per lb., the offal snuff is analysed by the Inland Revenue chemists at Somerset House, on whose report the rebate is ordered. The Kentish Hop Growers found that for hop blight snuff was in some way serviceable, and asked that they should be permitted to take snuff for this purpose duty free from the Customs. Paragraph 478 of the Inland Revenue regulations sanctioned the use for Hop Blight of duty free snuff, but exacted that it should

be "denatured" by the addition to every 75 parts of snuff, of 25 parts of sulphur, 5 parts of assafoetida, and 6 parts of sago flour, in order that its use for ordinary snuffing would be impossible. Thus treated the snuff was delivered from the Customs, duty free, and some was bought by German Jews and others, who forthwith took it and mixed about 25 parts of the "denatured" snuff with about 75 parts of genuine snuff, and tested the Inland Revenue chemists with it, asking for the drawback of 3s. 3d. on the whole mixture. To the glee of the swindlers the Somerset House chemists passed the fraudulent snuff as genuine, and the rebate of 3s. 3d. per lb. was allowed on the lot. An immense trade in this fraud on the revenue was speedily developed, and although the presence of the sulphur, assafoetida and sago flour was palpable enough to be detected by the veriest chemical tyro, the department presided over by Dr. Bell, F.R.S., and Mr. Richard Bannister, passed it as genuine time after time, and sanctioned payment of rebate of 3s. 3d. per lb., on at least 25 per cent. of denatured snuff on which the rebate had been once previously paid by the Customs. The demand for rebate became so heavy, and the use of snuff for hop blight so great that the suspicions of the Customs chemists were aroused, and they decided to examine the snuff, although it was not their duty to do so, the Customs being bound to accept as correct the analysis of Somerset House. They at once saw the fraud, and pointed it out to the Somerset House Department, who denied its existence, and in the presence of the highest officials concerned with the revenue, disputed the presence of sulphur, etc., in the snuff. Their objection was over-ruled in a summary fashion, for a poker was taken and its flat edge covered with snuff, which was then thrust into the fire, and the blue flame shown to the highest officials as a proof positive of the incompetence of the Somerset House chemists, which the smell further proved. The scandal was kept quiet, and a severe warning given to the Somerset House pseudo-analysts, but, despite this warning, other cases followed. Cocoa leaf was put in snuff, and passed as genuine snuff from tobacco leaf by the Inland Revenue chemists. 12,000 lbs. weight of snuff made from ground cigar ends collected in the streets and from tobaccoists, were found by the Customs, the presence of the burnt tobacco being glaringly palpable. Parcels of as much as 50,000 lbs. of fraudulent snuff were analysed and passed by the Inland Revenue chemists as genuine that contained quite 40 per cent. of alkaline carbonates (carbonate of potash) and 60 per cent. tobacco. On each fraud of this magnitude the revenue lost from £2,500 to £4,000, according to the character of the adulteration. The total result in money will probably never be known, but as a matter of national self-respect the result to science ought to be accurately and speedily made public. It is now more than six months since we were driven by public considerations to begin our exposures of the department. We showed how their incompetence in butter analysis strangled English and Irish dairy farming and fostered foreign free fraud. We have proved the same in regard to milk, and with respect to the loss to the public we have proved them to be defrauded of millions annually by unscientific Somerset House thievery-encouraging-standards. We are sorry such should be the case, but being as it is, the sooner a clean sweep is made of the department the better. One hundred and twenty public analysts a few weeks ago protested against Somerset House chemists being referees under the Food and Drugs Acts. They included practically every representative analyst of repute in the kingdom. Condemned thus by its own works, and by representative English scientists, the longer existence of the department is, as we have said, not only an insult to science but a danger to the public.

"TRUTH" ON DR. BELL.

Truth last week contained the following:—

A correspondent, writing apparently on behalf of Dr. James Bell, objects to the remarks made in these columns three weeks ago to the effect that "public analysts have a legitimate grievance against the Principal of the Inland Revenue Laboratory at Somerset House." "Practically," writes my correspondent, "the only point of disagreement between the public analysts and the chemists of the Inland Revenue Laboratory is connected with the subject of milk." But, on referring to the letter sent by the public analysts to Dr. James Bell, I find that there is a distinct complaint also on the subject of butter. The difficulty appears to arise from the difficulty of establishing a uniform standard of purity. All that the public analysts aver, however, is that Dr. Bell and his colleagues should so word their certificates as to make the terms in which they are stated as fair to the public analyst as to the trader. Dr. Bell replies that there would be serious objections to making any such additions to the certificates as are proposed. But he does not state what these serious objections are, and I am, therefore, still inclined to think that the grievance is well founded.

CIRCULAR NOTES.

THE "LANCET" AND ALUM IN BAKING POWDER.

In a report on an analysis of Fruit Salt Baking Powder made by W. G. Dunn & Co., Croydon, the *Lancet* says:—

FRUIT SALT BAKING POWDER.
(W. G. Dunn & Co., Croydon.)

"This powder is free from objectionable ingredients, and more particularly alum. It simply contains well-known salts, which when moistened interact and evolve carbonic acid gas. We protest against the use of alum in baking powder. The laws of the country do not allow alum to be used in bread, flour or other foods, and although baking powder is not a food any more than are pepper, vinegar, and mustard, it is solely and ostensibly made for no other purpose than for incorporating with certain foods, with the object of rendering them porous and light."

A DILIGENT STRAND INSPECTOR PRAISED IN HOLLAND.

Our contemporary, the *Revue Internationale des Falsifications*, published in Amsterdam, says in its issue of March 15th:—

"There is no country where the consumption of meat and butter by workmen is so great as in England. It is therefore important that the purity of these articles should be rigorously exacted. Inspector Strutt in ordering a meal in a London restaurant in Essex-street, Strand, took a sample of the butter served to him. Analysis showed that it contained some 50 per cent. of margarine. The judge in consequence condemned the delinquent, James Hutchinson, to a fine of £3, observing that it is inhuman to serve to working-men such a substance when they pay the price of pure butter for the real article."

As Dr. Hamel von Roos's excellent journal, like *FOOD, DRUGS AND DRINK* has its subscribers in every country in the world, we shall be hearing of Inspector Strutt's example being followed by Inspectors in America, France, Germany, and other countries, but why is it not followed in other districts in London? It is notorious that eating-houses, coffee-shops, restaurants, and even the best hotels in London, supply more margarine than butter to their customers. How is it they are never prosecuted?

COMPENSATION FOR TUBERCULOSIS MEAT.

Meat salesmen are everywhere complaining over the unconscionable time taken by the Board of Agriculture in issuing the report on bovine tuberculosis. They have a distinct grievance in the fact that, even if they buy the best beasts, they have no means of knowing if the animals suffer from the disease until after they have been slaughtered, and that although medical opinion is at variance as to the possibility of tuberculosis being transmitted from animals to man, the carcasses are condemned on signs of tuberculosis being detected, without any compensation whatever being paid to the butcher who has bought the carcass in good faith. They claim that compensation should be allowed as in the case of animals destroyed in foot and mouth disease outbreaks.

THE ANALYSIS OF BUTTER SUBSTITUTES.

It was an important announcement that Mr. Otto Hehner made at Huddersfield on the 7th inst., when he was summoned as a witness in the prosecution of a salesman of the Golar Working Men's Co-operative Society, for selling butter adulterated with margarine and water. Mr. Hehner said he had discovered a method of analysis by which he could discover the presence of margarine in butter even if the quantity were not more than 4 or 5 per cent. Having discovered this important test, Mr. Hehner will still have to educate the Somerset House referees in the use of it; otherwise his skill and successful research will be as nothing.

DR. HARRIS ON SMALL FINES.

We have still to complain of the inadequate fines inflicted even by stipendiary magistrates on fraudulent shopkeepers. Our complaints are echoed by Dr. Alfred Harris, Medical Officer of Health for Islington, who in his last Report says:—

"For the first time since 1888 samples were taken under the Margarine Act, with results that may be considered fairly satisfactory; and penalties ranging from 2s. 6d. to 20s. were inflicted, some of which were allowed to the Vestry. These penalties, however, were in some cases so small that although convictions were obtained, yet the Vestry was practically fined for putting the Act into operation. Surely if an offence is proved, the least that can be expected is that the fine and costs should cover the expenses of the Sanitary Authority in enforcing the law. This Act is a most valuable one and should be administered more generally than it is by local bodies, for undoubtedly there are immense quantities of Margarine sold to the public as Butter, to its prejudice and to the prejudice of the great agricultural interests of Great Britain.

"In one instance the case against a defendant was dismissed without evidence being heard, although he admitted the margarine was not labelled, on his taking out a summons against his assistant, who was then fined 20s., which fine was, however, allowed to the Vestry. In such a case as this it would be far

better to hear the charge against the defendant before dismissing it, because it would be quite possible for him to start a bogus prosecution against his assistant so that he might continue to appear to the public as an honest tradesman. For instance, in a case of this kind it would be possible for a man, although the business was carried on under his immediate observation, to act similarly to the above defendant, and for the magistrate to treat the case as in the instance mentioned. Yet it can hardly be conceived that if a justice knew he was continually present, and that possibly even when the margarine had been purchased he was in his shop, he would allow a prosecution against the assistant, whose fine would in such a bogus prosecution be paid by the employer. Surely this is a loophole through which fraudulent dealers might escape punishment. The English law does not yet recognise a scapegoat."

LOCAL AUTHORITIES & DR. CAMERON'S BILL.

The following is a copy of a letter sent to Mr. J. Lang, clerk to the Glasgow Police Commissioners, by Dr. Cameron, M.P.:—
80, St. George's-square, London, S.W.,
16th March, 1893.

Dear Sir,—I have received your printed letter regarding my Sale of Food and Drugs Bill, and there is only one point in it on which I must join issue with you, and that is, that "in the interests of all concerned, and especially the public, the proposed bill is unnecessary."

So far as the interests of the public are concerned, you are quite entitled to your opinion and I to mine; but, so far as regards "the interests of all concerned," those principally concerned have spoken for themselves.

It was primarily at the request of an association of retail traders in Glasgow that I introduced a bill embodying what I suggested as an equitable proposal—namely, that as they by law were held to sell to their customers under an implied warranty, the wholesale houses with which they dealt should be bound to supply them on such an understanding.

Since its publication, my bill has elicited the warmest support and approval, not only from organizations of retail dealers, but from various associations of wholesale dealers also.

But while entirely repudiating your statement that the bill is unnecessary in the interests of the public and other parties concerned, I admit the imperfection of its machinery and details. To perfect these I believe that information is wanting, and I propose that the bill, when read a second time, should be submitted to a Select Committee, before whom the public and those concerned—including, I hope, some representative of the Glasgow Police Commissioners—could state their views and objections.

In this way the matter which every interest concerned unites in declaring urgently requires revision would, I believe, be inquired into, with a good prospect of a speedy and satisfactory settlement.

I may add that representatives of wholesale and retail traders in the House are agreed that the bill should be read a second time on that footing; and I venture to hope that, with this explanation before them, the Glasgow Police Commissioners will reconsider their position as regards the bill.—I remain, &c., yours very sincerely,

CHAS. CAMERON.

To J. Lang, Esq.,
Clerk to the Commissioners of Police
of Glasgow.

To this communication the Glasgow Health Committee have informed that gentlemen that "they intend to oppose his Bill to Amend the Sale of Food and Drugs Act, and Dr. Cameron, who owns a newspaper in that city, told, on Wednesday, a meeting of a small clique of grocers that the committee would be dealt with for their opposition by voters in November next. No doubt, so far as Dr. Cameron's journalistic power extends, all that can be done will be done to the end of intimidating those who oppose his dangerous bill; but his threat was soumptious, and his assumption of the right to dictate to the Glasgow Health Committee so preposterous, that lest it should not be made public, we do so. As we showed last week, Dr. Cameron's Bill would stop the Adulteration Acts altogether; and it is because the Glasgow Health Committee know this and Dr. Cameron, that they oppose the Bill in the public interest. The Bill would make the invoice a warranty, by which the grocer selling adulterated articles would get off scot free, but there is no clause providing for the punishment of the person giving the invoice, and as that person may be in America, Denmark, Holland, Germany, or even Australia, it is all the same to him whether the invoice be a warranty or not, for no local authority could or would prosecute him for the fraud. It is notorious, as all local authorities know, that although under the existing acts the production of an absolute warranty enables the vendor to get off scot free, no one ever prosecutes the giver of the warranty. It is idle for Dr. Cameron, and those who with him wish to make the Adulteration acts a dead letter, to pretend they are unaware of this. Wednesday's meeting showed clearly that whatever may be the public professions, this was the private intention. Local authorities, therefore, who have not given the bill consideration as yet, would do well to do so quickly, and to

follow the example of Glasgow by instructing their Parliamentary members to oppose the Bill, and to ask for a Parliamentary enquiry into the working of the Adulteration Acts and the causes of their failure in so many parts of the Kingdom. Our article last week showed the damage Dr. Cameron's bill would do to Grocers and to the general public. The grocery trade has been brought to its present unprofitable state by unscrupulous cut-throat competition and legislation of the character of this measure of Dr. Cameron. We neither want to see grocers hounded and the prey of unscrupulous foreign thieves, which this bill of Dr. Cameron would bring about, nor do we wish to see English industries further crushed out, and the opening this measure would give to fraud, would extirpate English and Irish dairy farming and many other industries that are now heavily hit by partial foreign free fraud in food stuffs which this insidious measure would make universal. The central and associated chambers of agriculture in particular should bestir themselves in the matter, and move for a committee to enquire into the whole question of adulteration, and to secure a measure that would check foreign fraud, be just to English producers, and thoroughly equitable to the grocers, retail and wholesale. No greater calamity could befall the retail grocers than the passing into law of Dr. Cameron's ill-digested, tinkering proposal.

DR. CAMERON'S BILL.

We understand that the fatuous Bill of Dr. Cameron to "amend" the Food and Drugs Act will be strongly opposed in the House of Commons. The Kennington Vestry, through its Special Purposes Committee has passed a resolution condemning the Bill, and the Islington Vestry has taken a similar course.

THE PROSECUTION OF THE ADULTERATING MANUFACTURER.

The point that we dwelt upon last week in commenting on Dr. Cameron's Adulteration Acts Amendment Bill, has been taken up by the Middlesex County Council. The Parliamentary Committee reported at the meeting last week, that they had considered the Sale of Food and Drugs Act, 1875 (Amendment) Bill, which proposes to apply the provisions of the Act of 1875, or any amending Act, to wholesale traders and manufacturers. The committee were of opinion that it should be made clear by the Bill that the County Council should have power to proceed against the wholesale trader as well as against the retail one, and the committee directed a communication to that effect to be made to the promoters of the Bill. We cordially agree with the Middlesex Council in this, and we hope that they will insist on their Parliamentary representatives the necessity of carrying out this necessary amendment, and thus save the retailer from harassing and undeserved prosecution.

CHICAGO DRINKS.

An interesting report by Dr. Van Hamel Roos on swindles practised in America has just been issued. Dr. Roos says:—"The imitation of trade marks and labels of European firms who make spirituous liquors has developed in America in a manner truly alarming. There are establishments entirely engaged in the making of spurious liquor, and their proprietors send out catalogues stating that they are able to give special useful information to those who desire to enter into the fraudulent traffic. One firm," says Dr. Hamel Van Roos, "announces that it is prepared to sell recipes for manufacturing cider without apples, and for converting cider into any sort of wine." The firm also offers recipes for making spurious strong vinegar in twenty-four hours, and for the preparation of beautiful colouring matters for use in giving to all drinks, wines, spirits, etc., the appearance of the best brands. Essences are also advertised in the catalogues for manufacturing, at scarce any cost, every kind of spirituous liquid. "Best Irish Whisky" is a label found on a liquor made from drugs which never saw Ireland, and Dr. Van Roos makes similar charges about wines. Dr. Roos gives two illustrations of Curaçoa and Geneva bottles labelled as of Amsterdam and Schiedam. The firms whose names are given on the labels do not exist in either town. The firms making the bogus liquor are crammed with orders for Chicago, and working night and day to get stocks ready for the European visitors.

PRESTON IMPROVING.

Our contemporary *The Meat Trades' Journal* says:—

"The newly-appointed meat inspector at Preston has soon got into harness, for on Saturday week there were two seizures of meat, which in the opinion of the inspector was unfit for human food. In one case the carcass of a cow was seized at a slaughter-house, and in the other the meat was exposed for sale in the market. The *Inspector Herald* serves that with an energetic officer, Preston should soon clear herself of the unenviable reputation she has acquired as a depot for stink meat."

MARGARINE PROSECUTIONS.

At the Aston Police Court on 6th inst., Samuel Bellfield, provision dealer, 309, Victoria-road, Aston, was summoned for exposing for sale unlabelled a quantity of margarine. The defendant said he had taken off the label on the margarine for a few minutes, and that the inspector entered while he was engaged with a customer, previous to re-affixing the label. A fine of 40s. and costs was imposed. Mr. Ashford (Ansell and Ashford), prosecuted on behalf of the Local Board.

On 10th inst., at the Dublin Police Court, Mrs. Mary Fitzgerald, 39, Great Brunswick-street, was fined £3 for not having margarine properly labelled. Mr. McSheehy, solicitor to the Corporation, has prosecuted the following for not having margarine properly labelled—Michael McDonald, 62, Upper Dorset-street—fined £5; Eugene Coyle, 64, Great Britain-street—fined £5; Denis Cogan, 82, Queen-street—fined £5; Johanna Fox, 39, North Circular-road—fined £10; Anna Leigh, 22 and 23 Mary's abbey—fined £5.

At the Gorton Police Court, on 8th inst., before J. H. P. Leresche and W. W. Cooke, Esqs., Eliza Ann Morris, grocer, Gorton-lane, was charged with exposing margarine for sale without having it properly labelled. Inspector Smith visited her shop on the 8th ult. He saw two lumps of butter for sale. He bought a pound off one, and paid 1s. 4d. for it. He then asked for a pound off the second lump. There was no label on it, but defendant said "that is margarine." He then asked her "Where is the label?" She answered that she had none, but she had intended to get one. A certificate from Drs. Brown and Williams, county analysts, was put in. It said the margarine sent to them by Inspector Smith contained 9½ per cent. of water, and 75 per cent. of fats other than butter fat. Mrs. Morris said she thought she was right, as she sold the margarine in stamped papers. She had got a label now. She and her husband were separated, and the business was hers. The Bench said they had taken all the circumstances into consideration, and they imposed a fine of 10s. and costs.

THE OLD STORY.

ANOTHER OF THE FRAUD-PROTECTING CORPORATIONS.

A correspondent of the *Surrey Mirror* gives an instructive example for local consumption of the shortcomings of local authorities in putting into force the Sale of Foods and Drugs Acts. He says: "While looking through recent reports of the Local Government Board, I alighted on some particulars concerning the number of samples examined under the above Acts in the Borough of Reigate; and for the purpose of comparison, I also looked up the number of samples examined in the neighbouring Borough of Guildford. The figures—which are taken from Abstracts of Reports of Public Analysts—I give below:

REIGATE (population, 1891—22,646).					
Year.	Number of Samples examined.			Number found adulterated.	
1888	—	..	—
1889	11	..	1
1890	—	..	—
1891	4	..	2

GUILDFORD (Population, 1891—14,319).					
Year.	Number of Samples examined.			Number found adulterated.	
1888	62	..	1
1889	65	..	3
1890	54	..	5
1891	54	..	9

I have no particulars for 1892, but from a study of the above figures, one might reasonably conclude that the past year was a period of rest for the Reigate Borough Analyst and his Inspector. You will note that in Guildford the number of adulterated samples has steadily increased. If this is the case where the inspector is on the alert, how does Reigate fare?

I conclude with an extract from the twenty-first annual report of the Local Government Board. After noting the fact that the number of samples examined in some boroughs is quite insignificant in comparison with the population, the report says: "It is surprising that the Local Authorities in these and many other cases, are content to leave the inhabitants without that protection against fraud, by the sale of adulterated food, which the exercise of the statutory powers conferred on the authority, would be likely to ensure."

Brewers of stout have much to answer for. Lecturing at Birmingham, Sir Crichton Browne told his audience that gout was almost unknown in Ireland until the introduction of Dublin stout. He says it is proved in from 50 to 75 per cent. of the cases that gout is hereditary.

PUBLIC HEALTH NOTES.

Mr. A. Wynter Blyth, medical officer of health for Marylebone, in his report for February, notes that smallpox is still on the increase in London, though it has not been very prevalent in that parish. Incidentally Mr. Blyth mentions a new process for disinfection. Hitherto when sulphur has been employed for disinfecting purposes, it produces a gas known as sulphurous acid gas, or scientifically as sulphur dioxide. The gas has been recently liquefied by cold and pressure in bulk, and can be bought in convenient hermetically sealed tins, each tin being equal to about 2 lbs. of sulphur. The tin is so arranged that the disinfectant has merely to cut off a projecting lead tube and the gas hisses out. This is likely to be a far more effectual and convenient way of sulphuring a room than the old process, and is now being given a prolonged trial in the parish.

Dr. Alfred Harris, medical officer of health for Islington, in his report for January, remarks about the Yerbery Road Board School, that this school was closed during the whole month for the purpose of relaying the drains. It is a remarkable fact, although previously there had been a succession of diphtheria cases among the scholars, that not one case was notified during this period at their homes, thus to a large extent proving the contention of the Public Health Department that this school was responsible for a very considerable proportion of the diphtheria cases and deaths which had occurred among its scholars.

Referring to Prosecutions for selling unsound food, Dr. Harris says:—A prosecution instituted against the owner of a licensed slaughter-house for having the carcass of a sheep exposed for sale on his premises was dismissed, because it was not proved by the Vestry that it was there for sale. This decision was clearly against the 47th section of the Act, which states, that the proof that such meat was not intended for the food of man rests on the defendants. It appears to me that any persons with honest intention, having such food in their possession, should only be too ready to give information to the Sanitary Authority, and to ask its assistance in getting it destroyed. I have known many honest butchers who always did this; and I have known some who as persistently refused. Is it any wonder then, that the latter were looked on with something more than suspicion?

In the case of a prosecution of a tradesman carrying on business in Holloway-road, it was said in his behalf that the bad butter, which was really butter scrapings, was not intended for sale, and was about to be sold to a grease manufacturer, and that such butter could not be used for human food. It is, unfortunately, too well known that these scrapings are very much used by the lower class of pastry-cooks in the making of cheap pastry. In the case of the butter the charge was dismissed, but the defendant was fined forty shillings and costs for other offences.

Dr. A. Wellesley Harris, medical officer of health for the Borough of Southampton, gave his second lecture last week, at the Hartley Institution, the subject being house drainage, &c. The lecture was illustrated with lantern slides showing construction of house drainage in full detail. Among many other points, the doctor pointed out that sufficient importance was not attached to the nature of sewer gases, and showed clearly the danger of house drains not being disconnected from the sewers. The necessity of a good disconnecting trap between house drain and sewer was pointed out, and the necessity of thoroughly ventilating by inlet and outlet shafts to house drains. Some very interesting slides on the old form of water closets were shown, in which the dangers were clearly pointed out. The pan closet, with its container and D trap so commonly used, was proved by the lecturer most conclusively to be of great danger, as were also several forms of valve closets. The long hopper closet was shown to be a very undesirable form, and wooden structures round closets were also considered to be unhealthy, preventing, as they did, examination of any leakage about the joints. Slides were shown on the more modern forms, the lecturer considering expense. The short hopper, with a flushing run made by Doulton and fitted with a syphon tap, he considered a very good closet for small houses where economy was a consideration. The best forms were flush-out closets, provided when the water supply came in sufficient quantity and force to clear the whole trap and closet, these could be fitted with a wooden hinge top, and serve for the purpose of a slop sink, urinal, or water closet. Some of the designs were quite ornamental. The advantages of the separate flushing cisterns, the question of materials for drain-pipes and laying of drain-pipes, were discussed. The practice of drain testing was gone into very thoroughly. The lecture was attended by an appreciative audience, and Dr. Harris, in concluding his lecture, stated that the next and last

lecture would be on matters of personal hygiene and the prevention of disease, diet in health, disease, and infancy.

Dr. Bulstrode, an inspector of the Local Government Board, visited Falmouth on the 20th inst., and met the members of the Falmouth and Truro Port Sanitary Authority with reference to the prevention of the importation of cholera. Those attending included Messrs. T. Webber (Mayor), J. Bissou, J. S. Kelway, R. A. Daniell, H. J. Rusden, H. Liddicoat, Dr. W. R. Bullmore, and T. S. Skinner (clerk). The conference lasted a little over an hour. Dr. Bulstrode impressed upon the Authority the importance of having every vessel arriving at the port thoroughly inspected, whether there was disease on board or not, and of providing hospital accommodation for cases of infectious diseases that might arrive. It was pointed out to Dr. Bulstrode that the expense of carrying out these recommendations might be £1,000 a year. The Inspector combatted the argument that the cost should be defrayed out of the Imperial exchequer, but he said it would be manifestly unfair to compel the Port Sanitary Authority to undertake such an expenditure, seeing that it was intended to be for the good of the country at large. That was a point which might reasonably be strongly impressed upon the Local Government Board, and without serious objection.

ALUM IN BAKING POWDER.

To the strong condemnation of the adulteration of baking powder with alum recently uttered by the *Lancet*, already familiar to our readers, we have to add another from the *British Medical Journal* of the 18th inst., which says:—

"All who have learnt to appreciate the gravity of adulteration frauds will learn with much satisfaction that convictions for the sale of baking powders containing alum have at length been obtained, in spite of the legal quibbles and pseudo-scientific arguments which up to the present have been so successfully used to obscure the real issues in the matter, and to prevent the suppression of this most objectionable form of sophistication. On January 18th and on February 8th certain grocers were fined for selling baking powder containing alum; and the first case, which was heard at Pontypridd, was pretty thoroughly gone into. Public authorities, at any rate those having any honest desire to apply the Acts, have hitherto been deterred from dealing with alumed baking powders in consequence of the fact, that a case was dismissed on the ground, that although baking powder was used for making food, it was not itself an article of food, and therefore did not come within the operation of the Food Acts. It is remarkable that a decision so thoroughly opposed to the spirit and intention of these Acts should have been left for a long time unchallenged by further prosecutions, more especially as the position occupied by the leading functionary who gave it seems to be somewhat obscure. We are, however, more concerned with the scientific aspects of the subject than with legal finesse of the character referred to, while we note with satisfaction that the 'technicality' has been overruled. In the Pontypridd case the public analyst's certificate showed that the so-called baking powder consisted of 54 parts of alum and 46 parts of bicarbonate of soda; and yet 'expert' witnesses were found to say that such a preparation could not be objected to. This fact we regard as most regrettable, and we might use a much stronger expression. Upon theoretical grounds, it ought to be obvious that the introduction of such a substance as alum into a food would be, to say the least, very unsafe, and therefore inadvisable; but to approve of or to defend its introduction upon purely theoretical grounds, is indeed a novelty, even in the annals of 'expert witnessing.' And this is what appears to have been done. It was, it seems, alleged that in using the powder the alum became 'harmless hydrate of alumina,' and that this was simply 'an inert matter which passed away with the faeces, without injury to the system.' No experimental evidence whatever appears to have been adduced in support of this contention; while on the other hand ample experimental evidence was given to show the injuriousness of both alum and hydrate of alumina when ingested. It has been proved beyond question that these substances are highly injurious both to animals and to man, apart from the experiments published in the *Analyst*, which are in themselves sufficiently conclusive. The singular thing is, that probably no one would now think of defending a person who had sold bread or flour containing alum, or for that matter hydrate of alumina, and we can only express astonishment that anyone can be found to defend the use of preparing food of a substance which is known to be injurious, which enables inferior and damaged flour to be employed for making bread, and the sale of which, either in food or for the purpose of preparing, constitutes as plain and dangerous a case of adulteration as any that have been placed in the shameful records of this form of fraud."

In the face of this emphatic condemnation of the support by "experts" of alum adulteration, we shall be curious to see what kind of evidence the fee-hunting experts will give at Swansea on the 4th prox., when certain appeals against convictions for adulteration of baking powder will be heard.

ADULTERATION PROSECUTIONS.

MILK.

At the Sheffield Town-hall, on the 6th inst., before Mr. A. M. Chambers and Mr. J. W. Wilson, a lad named Ernest Gosney, milk seller, 36, Monmouth-street, was summoned for selling adulterated milk on Sunday, 12th ult. Mr. H. Sayer, deputy Town Clerk, prosecuted, on behalf of the Medical Officer of Health. On the day mentioned Inspectors Gibson and Harrison visited the M. S. and L. railway station, and there saw the defendant with his milk cart. They found one empty bottle, another three-parts full of old milk, a third containing two gallons of water. The inspectors bought a pint of old milk, for which they paid a penny. On examination it was found to contain 30 per cent. of water. Gosney urged in defence that he did not usually take out old milk, but only did so that morning to accommodate a customer. He did not put the milk in the cans that morning, and he did not know who did. The Bench fined him £1, and 7s. costs, or ten days' in default.

John Hutchinson, of Green-house, Fulwood, was also summoned for selling a quantity of milk on Sunday, 12th ult., which was not of the required quality. The inspectors bought the milk from the defendant in Eyre-lane. The defendant told them that he had both old and new milk, but that some of it was bought from another milk seller. He showed them which was his own, and the inspectors bought a pint of it as skimmed milk. It was found on examination to contain 17 per cent. of water, and 83 per cent. of skimmed milk. The defendant said it was not his own milk, as it was all bought on the previous night. Fined £1, and 7s. costs.

On the 15th inst., at the Barnsley Police-court, Messrs. T. Norton, E. Lancaster, C. Chapman, C. H. Taylor, and Captain Ormsby, James Falstead, milk seller, of Wombwell, employed by the Farmers and Cleveland Dairies Company, Limited, was charged, under the Food and Drugs Act, with having sold a quantity of milk which was adulterated to the extent of 20 per cent. by added water, and was not, therefore, of the substance demanded by the purchaser, on the 26th ult. [We gave a short account of this case last week.] Mr. C. J. Tyas prosecuted on behalf of the Barnsley Union Rural Sanitary Authority, and said, although the proceedings were taken against the defendant, the persons they suggested who were implicated were the Farmers and Cleveland Dairies Company, Limited. Thomas John Hall, inspector of nuisances to the authority, deposed to purchasing milk from the defendant, and after dividing it, sending a portion to Sheffield to be analysed. Mr. Allen, the analyst, certified that the milk contained 20 per cent. of added water. Mr. J. Carrington intimated that there was a prosecution against the defendant by his employers. Mr. Tyas observed that however the company might manage their business, they were certainly bound to deliver to people genuine milk. The Chairman said the Bench were determined to make an example of any one who defrauded the public in this way. They fined defendant 40s. and costs. Defendant was then charged, at the instance of Robert Johnstone Hyslop, local manager of the Farmers and Cleveland Dairies Company Limited, that on the 26th ult. he committed damage to certain property of the company by adding water to new milk. The damage was laid at 6d. Mr. Carrington, who prosecuted, said the case was brought to show the public that the company insisted upon them being supplied with a genuine article. Every consignment was bought by the company subject to a guarantee as to the genuineness of the milk, and when it was supplied to the defendant it was genuine. Mr. Hyslop said defendant had admitted to him that he had added water to the milk, and he had also admitted that he was quite satisfied with the quality of the milk before he took it out. The defendant, who admitted the offence, was ordered to pay 6d. damage, and costs.

Henry Lingham was summoned under the same Act for selling milk on February 3rd, a quantity of the cream having been abstracted. Mr. Monckton appeared to prosecute. William Jackling proved purchasing the milk and submitting part of it to the analyst. He wrote to Mr. Lingham, who saw him, and he (Mr. Lingham) stated that the cow was a poor one, and would not have as much cream as an ordinary cow. He (Mr. Jackling) then offered to take a sample of milk fresh from the cow, and have it analysed, which he did. The analysis of the first sample showed that it had been deprived of about half its cream, but the second report was not taken as evidence. Defendant, in defence, said that the cow had been calved about twelve months, and would not give so much cream as one freshly calved. Inspector Eaglestone proved serving the summons. The magistrates convicted, and fined defendant 10s. and 10s. costs. Paid.

On the 17th inst., the Leicester borough magistrates had before them three cases in which the defendants were summoned for having sold milk not of the quality demanded and represented. John Crawford, farmer, of Gunthorpe, Rutland, was first charged, the prosecution being undertaken by the Corporation. Defendant had contracted to supply Mr. Brady, dairyman, with milk, and some of the cans sent by him to the Midland Station on February 28th were tapped and the milk analysed. One sample was found to be adulterated with 6 per cent. of added water, but another was found to be not illegally adulterated. Mr. Brady said the contract was for pure unskimmed new milk. He had dealt with defendant for six years, had often had his milk analysed, and had never found anything wrong with it before. Dr. Priestley supported his analysis, and said the certificate might really be taken to represent 10 to 12 per cent. added water. For the defence it was stated that Mr. Crawford had 50 or 60 cows, and five or six men employed to milk them. He usually superintended the work himself, but at the time in question he was

in London, and the men had no check on their movements. The only suggestion he could make in explanation of the adulteration was that either the cows were not properly milked or a portion of it was wasted, and the quantity made up with water. One maid had been found acting in that way, and was discharged. A fine of 20s. was imposed. The second case was against Horace Henry Flower, dairyman, of Leicester, whose sample was found to be adulterated with 13 per cent. of added water. For the defence it was said that defendant emptied the milk from one of Mr. Crawford's cans into his own at the station, and the sample was taken before he got home, so that he had no opportunity of tampering with it, if he had felt disposed to do so; and in the third case, in which John William Bednall was the defendant, the circumstances were said to be identical with those in Flower's case. A fine of 20s. was inflicted in each case.

At the Aston Police-court on the 6th inst., before Messrs. Hill and Smallwood, James Bolt, dairyman, was charged with selling a quantity of milk deprived of 18 per cent. of its cream at Aston, on the 14th ult. Benjamin Bolt, inspector under the Food and Drugs Act, stated that he saw a person in defendant's employ in Mansfield-road on the 14th ult. retailing milk from a can. Witness purchased half a pint of milk which was supplied to him from the can, which appeared to be half full. On a portion of the milk being analysed by Dr. Bostock Hill, it was found to be deficient in cream to the extent of 18 per cent. Witness took other two samples from the same can, and these proved to be genuine. The same morning also he had taken two samples from another cart belonging to the defendant, and these also proved all right. It was stated for the defence that the man Bayliss, who supplied the milk, had given a warranty with it. After a short deliberation, the Bench expressed the opinion that in their judgment the defendant had taken all reasonable precautions, and had complied with all the provisions of the Act. The case would therefore be dismissed. Mr. Hill observed at the same time that in the opinion of the Bench it would be well in such cases if a warranty were given by the vendor of the milk with each can.

At the Dartford Police-court, on the 10th inst., Thomas Birt was summoned for selling adulterated milk on January 31st. Superintendent Webster stated that he purchased a sample of new milk of defendant, which had been sent to the county analyst, whose certificate was as follows: 84.4 parts milk; 15.6 parts added water. Defendant said he sold the milk as he bought it. The Chairman said defendant had been buying too much water apparently, and he should have taken the precaution to get a warranty with the milk. He would be fined 40s. and costs.

On the 16th inst., at the Dursley Police-court, Henry Watts, of Uley, was fined 10s., and 9s. 6d. costs, for selling adulterated milk. His defence was that he sold the milk in the same condition as he received it, having purchased it from several farms.

At the Hammersmith Police-court, on the 10th inst., Arthur Whitehouse, Elliott-road, Chiswick, was summoned by Inspector Tyler for selling milk adulterated with 6 per cent. of added water. There was a former conviction, and the defendant was fined 50s., with 12s. 6d. costs.

George Arnold, of Windmill-road, Chiswick, was fined 20s., with costs, for selling milk containing 9 per cent. of added water, there not having been any previous complaint.

At Neath County Petty Sessions on the 10th inst., Rees John, farmer, Baglan, was summoned for adulteration of milk to the extent of 7½ per cent. on the 7th ult. Superintendent Thomas, Bridgend, prosecuted, and Mr. H. P. Charles defended. After hearing the evidence the Bench saw there was a doubt, and dismissed the case.

James Drew, 6, Layton-road, a milkman, was summoned before General Tremenheere (in the chair), and other magistrates at the Brentford Police-court, on the 4th inst., for selling milk adulterated with at least seven per cent. of added water. The Chairman ordered the defendant to pay costs, amounting to 15s. 6d.

On Friday 17th inst., E. Hopley, a dairyman, of Selkirk-road, Tooting, was fined 10s. for selling milk adulterated to the extent of 10 per cent. of added water.

At Edmonton, on the 13th inst., William Charles Elms, dairyman, of Granger's Farm, Lordship-lane, Wood-green, was fined £5 and costs for selling milk adulterated with 7 per cent. of added water.

At the Dublin Police-court, on the 10th inst., Anne Hayden, 62, Francis-street; butter-milk adulterated with 45 per cent. of water. Fined £5. Dennis Kavanagh, 2, Charlemont-street; milk adulterated with 12 per cent. Fined £1. Thomas Mooney, 88, Cork-street; butter-milk adulterated with 40 per cent. Fined £5. Denis Byrne, 14, Dolphin's Barn; milk adulterated with 12 per cent. of water. Fined £1. Mr. MacSheehy prosecuted, and Food-Inspector Cook proved the cases.

BUTTER.

The Blackrock Township Commissioners, as local authority under the Food and Drugs Act, summoned Mr. John J. Keegan, of Williamstown, before the Kingstown Police-court, on the 13th inst., for having on the 15th ult. sold one pound of butter which was not of the nature, substance, and quality demanded. Mr. Gerald Byrne, solicitor, prosecuted for the Commissioners, and Mr. J. Ennis, solicitor, defended. Mr. John Guy, Sanitary Inspector of Blackrock Urban District, proved to having purchased the inferior article as set forth in the summons. Mr. Keegan and Mr. Kelly were examined for the defence to show the occurrence was purely accidental. The defendant had been 22 years in business and nothing of the kind had ever occurred with him. His worship said that he would take into account all that had been said in Mr. Keegan's favour, and impose a light penalty of 40s.

At the Gorton Police-court, on the 8th inst., Charles Roscoe, grocer, Church-lane, was summoned for selling butter adulterated with an excessive amount of water. Inspector Smith visited the shop on the 9th February, and purchased a pound of butter. He asked to be supplied from a piece which stood on a plate on the counter, and which was marked "pure butter, 1s." He was served, and then told Mr. Roscoe it was for the purpose of analysis. Thinking it rather cheap, he put the question to Mr. Roscoe, "Is it butter?" He replied "Yes, it's pure butter, guaranteed to be such." Afterwards he said "If there is anything wrong I can recover." Mr. Smith read the analyst's certificate, which stated that the butter he had forwarded to them contained 22 per cent. of water. Mr. Roscoe, in defence, said he bought it as pure butter, and sold it as such. He was pressed by Mr. Leresche as to whom he purchased it from, but he replied that he could not say, he bought so many packages. Mr. Leresche: We want to know, because you can bring your action against the person who supplies you, and you can recover from him the whole of the fine and costs put on you. In that way we can reach the fraudulent person who supplies this vile stuff, but if we let you off, we protect him. Who is the person? Mr. Roscoe: It was a remnant, and there would not be more than five or six pounds at the most. Mr. Leresche: Who did you buy it off? Mr. Roscoe: It was a remnant of butter that I had. Mr. Leresche: Who did you buy it off? Mr. Roscoe: I could not say. It was a remnant of butter. I did not add any water to it. I buy off three or four persons. Inspector Smith pointed out that at the shop Mr. Roscoe said it was guaranteed to him as being pure, and that he could recover from the vendor if there was anything wrong with it. Mr. Roscoe explained that he had the invoice for the butter, but he could not say which firm it was from. He further pointed out that there was only 5 per cent. of water in excess of the quantity allowed. He handed to the stipendiary a copy of the *Grocers' Review*, and asked him to pursue a leading article dealing with some prosecutions that were recently instituted in the City Police-court. The defendants were there charged with selling butter adulterated with water. Mr. Leresche glanced at the article. Mr. Roscoe drew attention to the concluding sentences, in which the writer warned the trade that at the end of February they would be liable if there was an excessive quantity of water in butter they sold. Inspector Smith paid the visit to his shop on the 8th February. Mr. Leresche said because the editor of this trade paper had expressed a certain opinion that had nothing to do with the law. After consulting Mr. Cooke, he said Mr. Roscoe must pay a fine of 40s. and costs. Mr. Roscoe: These summonses were withdrawn—Mr. Leresche (interrupting): You had better go into Manchester. You shall not sell it here. Mr. Roscoe: Well, this—Mr. Leresche: Stand down, sir, if you please.

At the Eckington Petty Sessions, before Alderman J. F. Swallow and Major L. B. Bowdon, on the 13th inst., Edwin Hickling, grocer, Eckington, was summoned for selling butter which was adulterated with 67 per cent. of other matter contrary to Section 6 of the Food and Drugs Act, 1875, at Eckington, on January 19th. Fined 10s. and costs.

LARD.

On the 11th inst., at the Rothbury Police-court, John Ormston, grocer, of Snitter, and John Oliver, grocer, of Harbottle, were summoned at the instance of the police-superintendent of Rothbury for having on the 25th January sold lard adulterated with 5 per cent. of cottonseed oil, contrary to the section of the Food and Drugs Act, 1875. The Rev. Mr. Medd presided, and the other magistrates present were Messrs. Watson Armstrong, W. Hawthorne, and W. Forster. Mr. C. Alderson, of Morpeth, appeared for the police, and Mr. T. Bellringer (Bellringer and Cunliffe, Liverpool) represented the defendants. At the opening of the court, Mr. Alderson said he wished to make an application that the two summonses might be withdrawn. Since the summonses were served a communication had been received from the county analyst, in which he threw some doubt on the accuracy of his certificate, and as the summonses had been issued on the strength of that certificate, the police now wished to withdraw the case and allow the whole matter to drop. Mr. Bellringer, before consenting to a withdrawal, made a short statement. They had submitted a portion of the lard sent to the county analyst to separate analysis by Dr. Campbell Brown, and he reported "that the said sample is genuine lard, of good quality, free from cottonseed oil and beef fat. No change had taken place in the constitution of the sample that would interfere with the analysis. I have submitted the sample to five separate tests, which all agree in showing the lard to be genuine." The Chairman said the magistrates agreed to the withdrawal of both summonses.

At Leicester, on Saturday, before Captain Pochin (in the chair), Colonel Bellairs, Colonel Mansergh, and E. R. Norman and T. G. Paget, Esqs., William Duval, provision dealer, Leicester, was summoned for selling adulterated lard at Barkby on the 4th February. Mr. Hincks appeared for defendant, and objected to the summons on the ground that the Act stated that with regard to "perishable" articles the summons must be taken out within twenty-eight days of the purchase. The magistrates' clerk (Mr. R. B. Berridge), said he hardly read the Act in that way. As far as it went every article of food was perishable. Mr. Hincks said that flour was not perishable. Mr. Paget: It would perish in time. Mr. Hincks pointed out that it was not liable to decomposition as mentioned in the Act. He also objected because the analyst had not stated in the report whether the article had decomposed at all, as he was supposed to do in accordance with the Act. The case was withdrawn on these two objections.

At the Sunderland County Police-court, on the 18th inst., Peter Morris, manager of the Ryhope Co-operative Store, was charged with selling lard adulterated with foreign matter. George Wilson, assistant inspector, deposed to purchasing 1 lb. of lard at the Ryhope Store, for which he was charged 5d. He generally paid 7d. or 8d. per lb. for lard at other places. Mr. Stock, county analyst, stated that he had analysed the lard, and found that it contained 7 per cent. of beef fat. Mr. Lambert, for the defence, admitted that the case was a serious one, and said there was no doubt that which ever way the Bench decided, it would have a certain bearing upon a very large industry in this country. He maintained, however, that according to the sub-section of the Act, no offence had been committed, inasmuch as beef fat was not injurious to health. The admixture was introduced simply for the purpose of "stiffening," and to make it fit for carriage in the ordinary way of commerce. Witnesses were called who bore out Mr. Lambert's statement, and the latter produced warranties, showing that the lard had been delivered to the store as "pure." The magistrates said they were decidedly of opinion that the lard had been adulterated, but as there was no evidence to show intention to defraud, they would give the defendant the benefit of sub-section 25 of the Act, and levy upon him the costs of the court.

BEER.

On the 16th inst., at the Worship-street Police-court, Mr. Dennis, on behalf of the Commissioners of Inland Revenue, attended to prosecute Henry William Hunt, licensed victualler, of 211, Brick-lane, Spitalfields, and George Holland Garlick, licensed victualler, of Gossett-street, Bethnal-green, who appeared to answer summonses for diluting the beer on sale by them. The defendants pleaded guilty, and Mr. Bushby fined the first-named £12 10s., and the second £15, the difference marking the difference of the adulteration. Then, addressing Mr. Dennis, the magistrate remarked that on the 23rd ult. a licensed victualler named Webb was before him, at the instance of the excise authorities, for not having entered in his stock-book the particulars of certain "permits" relating to spirits received by him. He (Mr. Bushby) had been informed by the representative of the Inland Revenue on that occasion, that although they only proceeded against Webb in respect of one "permit," involving a penalty of £100, they might really have prosecuted him in respect of over 20 "permits," involving fines amounting to thousands of pounds. Upon that statement he (Mr. Bushby) had imposed a fine of £50, believing that he was dealing leniently with him, since the statement for the prosecution showed that his offence was aggravated by systematic neglect of the Excise law. He (the learned magistrate) had, however, since been informed that the Board of Inland Revenue, upon a petition from Webb, had, as a sort of Court of Appeal, reduced the penalty to £5. That, no doubt, was within their powers under the Act, but if there were circumstances in the case which reduced the gravity of the defendant's offence, it would have been better to have brought those circumstances before the Court rather than to have reduced its proceedings and decision to a farce. Mr. Dennis said it had, he believed, been at one time the practice to consult the magistrate before reducing the penalty, but the practice had been changed, he understood, because magistrates had refused, on the ground of having already decided the case, to offer any opinion on the matter. Mr. Bushby said the only opinion he held in this matter was that the Excise had stated before him facts in aggravation of Webb's offence; and if there were facts in mitigation they should have been stated, and they would have been taken into account in fixing the penalty.

At the Bermondsey Police-court on the 15th inst., Daniel Birkbeck, proprietor of a public-house in Nelson-street, Bermondsey, appeared to a summons charging him with selling diluted beer. Evidence in support of the charge having been given by two Excise officers. Mr. Fenwick asked the defendant what he had to say in answer to the complaint. The defendant replied that the water must have been added by his manager without his knowledge. Mr. Fenwick declined to accept this explanation as a legitimate excuse, and fined the defendant £50 and costs. Defendant asked for time to pay the fine. Mr. Fenwick: No. You will have to pay at once or there will be a distress; or in default two months. Defendant: Does that mean that I'll have two months to pay? Mr. Fenwick: No. It means that you will have to go to gaol for two months if you don't pay. The defendant left the court grumbling.

WHISKY.

On the 11th inst., before the Mayor, Messrs. E. Wild, and J. Farrar Ranson, Robert Francis, landlord of the Duke of Fife, Thorn-lane, was summoned at the Norwich Police-court, by Sanitary Inspector Brooks, for selling whiskey unduly adulterated with water, on 3rd ult. Mr. E. Reeve appeared for the defendant. The Inspector applied that the summons might be withdrawn, as the wrong bottle had been retained. Mr. Reeve applied for costs, and the Bench allowed half-a-guinea, the case being dismissed.

GIN.

At Exeter, on the 15th inst., Henry Draper, of the Alexandra Inn, Starcross, was summoned for selling adulterated gin at Kenton. Police-superintendent Hamlin said on the day in question he purchased from the defendant a pint of gin, a portion of which he sent to the public analyst (Dr. Blythe), who reported that the gin was 42 degrees below proof. Defendant said when he bought the gin he had a certificate (produced), and he thought it to be right. Defendant was fined £1, inclusive.

At East Dereham Petty Sessions, on Friday, the 17th inst., David Burton, of Litcham, inn-keeper, was summoned under the Food and Drugs Act for selling gin under the prescribed strength. Mr. Wilkin, of Lynn, appeared for defendant. Superintendent Chambers stated that on February 16th he visited the King's Arms Inn, Litcham, kept by defendant, and purchased half a pint of gin. He told defendant he required it for analysis, and divided it into three parts, putting them into sealed bottles, one of which he left with defendant, another he took to Mr. Sutton, the public analyst, and the remaining bottle he now produced. The certificate received from Mr. Sutton showed that the gin was 36.5 under proof, the required strength being 35 under proof. Cross-examined: He was in uniform, and defendant knew him. He took some brandy at the same time, but had no fault to find with it. Mr. Wilkin, in defence, said when his client was asked to supply the gin he knew Supt. Chambers quite well, and it was not very likely that he would knowingly give him the means of convicting him of this offence, but the fact was that Burton had no idea that any specific strength was required. The gin was supplied by the brewers and owners of the house at 22 under proof, and the dealer was allowed to reduce it to 35. It was well known that if spirits were tested at different periods, a great variation in strength would be shown, and he suggested that in the interval between the time when the gin was taken and the time of analysis, the strength might have been reduced by evaporation, or more probable the result of variation. He wished to remind the Bench that the brandy sold by defendant was not diluted, and if defendant had been in the habit of diluting one spirit he would probably do the same with others. The Chairman said the magistrates were very jealous that there should be no infringement of the Act, and nothing prejudicial to the public should be done. There had been no complaints about the house, and there was nothing wrong with the brandy, therefore they did not think there was an intention to defraud. At the same time those who dealt in spirits should be very careful to give the requisite notice to show their customers as to how they were sold. There was nothing to show that there had been habitual adulteration, and the case would be dismissed.

DRUGS.

At Jarrow Police-court, Thomas Mason and Co., patent medicine vendors, Ormonde-street, Jarrow, were charged by Mr. Ed. Batey, inspector, Jarrow, with supplying on the 10th of January last 3 ozs. of paregoric elixir, not in accordance with the British Pharmacopœia. Mr. R. W. C. Newlands defended. After stating the circumstances connected with the purchase, Mr. Batey produced the following certificate from the county analyst: "The sample has a density of .955. It does not contain opium. It is the popular name for the compound tincture of camphor of the B. P., and which should have a density not exceeding .926, and should contain the soluble portion of 2 grains of opium in each ounce. It is not a genuine sample of paregoric; it contains 28 per cent. of extraneous water, and is devoid of the essential extract of opium." Mr. Newlands contended that his clients were protected by the label, which stated that it contained no opium. Mr. Batey contended that defendants had no right to use the word paregoric on the label, because without the opium it was not paregoric. The same firm were also charged by Mr. Batey with selling tincture of rhubarb, of which the following is the analysis: "Genuine tincture of rhubarb, 80.00 per cent; extraneous water, 20.00 per cent. Due allowance has been made for evaporation, I am of opinion that it is not a sample of genuine tincture of rhubarb." In defence, Mr. Newlands read a communication from the manufacturers stating that through some mistake they had sent the wrong quality. The Bench fined defendants 20s. and costs in each case.

FOOD PROSECUTIONS.

MEAT.

At Dublin, on the 10th inst., Mr. Thomas Butler, salesmaster and farmer, residing at Priesttown, county Meath, was charged by Mr. Bryan, superintendent of the Smithfield Cattle Market, with exposing for sale in the market two sheep which were unfit for human food. Mr. MacSheehy, law agent, prosecuted on behalf of the Corporation, and Mr. Bradley, solicitor, appeared for Mr. Butler. Mr. Bryan gave evidence. Mr. Butler sold the two sheep to John Plunket, 14, Cumberland-street, for 5s. each. Plunket said he bought them for sake of their skins. Sir Charles Cameron was examined, and stated that the sheep were in an advanced state of disease, and were unfit for human food. Mr. Butler was examined, and stated that he sold the sheep. Plunket said he wanted them for their skins. Witness did not know whether they should be used for food or not. To Mr. MacSheehy: I asked £1 apiece for them first. Mr. O'Donel: This is the worst case I ever had before me. It is not the case of an ignorant countryman trying to make money for his rent, but the case of a salesmaster. Mr. MacSheehy: And a judge at cattle shows. Mr. O'Donel: I have no hesitation in marking my sense of the character of this case by fining Mr. Butler £5 each for the two sheep. It is disgraceful.

At Dublin, on the 10th inst., Edward Gaynor, 153, Great Britain-street, was fined £5 for exposing butter for sale which was rancid and unfit for human consumption. Mr. MacSheehy prosecuted in the case, and Sir Charles Cameron gave evidence.

Denmark yearly exports agricultural and dairy produce to the extent of something like £5,000,000.

WEDNESDAY'S LONDON PRODUCE MARKETS.

CORN.—At this morning's market the attendance was small and the general tone of the trade was quiet. For fine English wheats there was some inquiry at Monday's rates, but other descriptions were slow of sale. Barley quiet at about former prices. Maize slow. Oats met a steady demand at Monday's rates to 3d advance. Flour inactive. Beans and peas quiet and unchanged. In the cargo trade wheat remains dull in all positions and in favour of buyers. Californians are not offered for shipment. Plate sailer, March 15, May made 27s; ditto, March-April, 26s 3d bid on samples. Indian inactive. Hard Winter April sold, 26s 6d; and hard Duluth, on passage, sold at 30s. Maize quiet, tendency in buyers favour. Danubian, April-May, offered at 19s 3d, and June-July 19s bid. Galatz-Foxanian, March-April, sellers at 20s. Poti sailed March 19, 18s 10½d paid. Barley quiet at about late rates; for Azoff due out, April 5 steamer, 15s is refused. Arrivals this week:—English and Scotch: Wheat, 480; barley, 510 quarters. Foreign: Wheat, 6,770; barley, 18,960; oats, 36,080; peas, 1,120; beans, 550; maize, 9,340 quarters; flour, 11,280 sacks.

SUGAR.—Refined less active, and transactions moderate. Pieces and crystals sold at full rates; stoved goods unchanged. Foreign refined steady, but rather quiet. French crystals, No. 3, 17s 3d c. f. and i.; Dutch crushed, 17s 9d to 18s; Continental granulated, 16s 9d to 17s 6d according to mark and prompt. Cane sugars firm. Tate's cubes, firsts sell at 21s 3d; seconds 20s 3d; crushed, firsts, 19s; Liverpool crystals, firsts, 20s; small, 19s 6d; seconds, 19s; granulated, 18s 6d. Martineau's cubes, firsts, 21s 3d; seconds, 19s 6d; titlers, 20s; pulverised, 19s 6d; chips, 19s 3d; granulated, 19s 3d per cwt. Beet opened weak, with sellers of March at 14s 8½d, buyers 14s 6½d; April, 14s 8½d sellers, 14s 7½d buyers. Afterwards the tone improved, and a moderate business was done. March, 14s 7½d plus ½ per cent.; April, 14s 9d less ½ per cent.; May, 14s 10½d. Closing strong at 1½d above yesterday's rates. Sales about 5,000 tons.

TEAS.—Prices are supported, and at the auctions of Indian grades from 9d downwards sold steadily. The finer kinds are dull and irregular: 7,900 packages catalogued. 824 packages China scented teas went occasionally in favour of buyers. China terminals rather easier. Indians unaltered.

COFFEE.—The auctions have offered full supplies of Central American, consisting of a fairly suitable assortment. Good and fine home trade sold with competition at full prices, and other kinds without essential change. Ceylon sold, greyish to colory, small, 101s to 107s 6d; middling to good, 110s to 115s 6d; fine, 116s 6d to 120s; pea berry, fine, 133s to 137s. 1,029 bags East India sold; Coorg small, 101s to 102s 6d; medium, 104s 6d to 107s; bold, 108s 6d to 110s 6d. 95 barrels Jamaica sold, 97s 6d to 100s. 2,723 bags Costa Rica sold, greyish to colory, 102s 6d to 106s 6d; bold, 109s to 110s 6d; pea berry, 111s, 118s, and 121s 6d. 378 bags New Grenada, 93s 6d to 100s 6d. 257 bags Guatemala sold, small, 101s to 102s; medium to bold, 105s to 111s; pea, 116s 6d to 118s. 339 bags Salvador, part sold, 101s 6d to 102s. 317 bags Vera Paz, 91s to 99s 6d. 134 bags Columbian, part bought in. 124 bags Nicaragua sold, 104s 6d to 106s; pea berry, 117s per cwt on ex quay terms. 236 bags Santos bought in, 82s to 85s; and 500 bags Rio, 87s per cwt. Futures steady, quiet. Closing quiet. New York opened 5 to 10 points down. Havre, March, 105½¢; May, 102½¢; Hamburg, March, 82½m.; May, 81m.; Amsterdam, 54½c.

SPICES.—At auction 814 bags black pepper bought in, Singapore 3d to 3½; Penang, 2½d; 318 bags white, half sold, Singapore ordinary 4½d to 4¾d, fine 6½d; 23 cases finest, 10½d to 10¾; Siam bought in, 4¾d. 688 bags Pimento, third sold, ordinary 3d to 3½d. 422 bales Zanzibar cloves, few lots sold, 4½d; 25 cases Penang, part sold, picked 11d, unpicked bought in 6½d; 103 packages Zanzibar stems bought in 1½d. 20 cases Singapore nutmegs sold, 80s, 2s 4d to 2s 5d; 20 cases Bombay, few lots sold, mouldy and defective 10d to 1s 5d; wild 7½d to 8d, some bought in 10d to 1s; 26 packages West India sold, 71s and 73s, 2s 5d to 2s 6d, 85s and 86s, 2s 2d; smaller, 1s 5d to 1s 10d; in shell, 1s 3d. 13 packages West India mace sold, 1s 8d to 1s 10d per lb. 49 packages Cochin ginger sold, rough 65s to 66s; 50 barrels Jamaica, 63s. 169 barrels Zanzibar chillies bought in, 52s 6d; 193 packages Sierra Leone, part sold, 41s; 39 bales Madras capscums bought in 30s per cwt.

ANOTHER POISON-BOTTLE FATALITY.

When will Parliament insist on a specially-shaped bottle being used to contain poisonous medicines and liniments?

At Diglis, Worcester, an inquest was held by the city coroner (Mr. Hulme) relative to the death of Sarah Ann Steal, who had taken an acetonite liniment prescribed for her father in place of her own medicine. The coroner asked Mr. Royle, surgeon, if it would not be a good thing that poisons should be put in blue ribbed, specially-prepared bottles, to which the witness replied that no doubt it would, but that the law of the land would have to be altered to insist on members of the Friendly Societies Association, of which the witness was surgeon, bringing such bottles.

"MALT-COFFEE."

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VESTRIES PROTEST AGAINST SOMERSET HOUSE CHEMISTS.

The Kennington Vestry met on the 15th ult., when the Special Purposes Committee reported that, in pursuance of the reference by the Vestry of the 1st March, they had considered the copy of correspondence between the Society of Public Analysts and the principal of the Inland Revenue Laboratory, Somerset House, relative to the wording of the certificates issued by that department on disputed samples referred to him under the Sale of Food and Drugs Act; and the committee recommended that a communication be addressed to the Local Government Board inviting their serious consideration of the said correspondence, and intimating that the Vestry are impressed with the importance that the authority, to whom reference shall be made under the Sale of Food and Drugs Act, shall be one that has the confidence of the public analysts of the country and the public generally. Mr. Vargas inquired why the Somerset House analyst was referred to in the recommendation. Mr. Braye (chairman of the committee) thought their analyst had made the matter plain. Mr. Vargas protested against such a resolution being passed on the ex parte statement of one of the Vestry officials. After a discussion by Messrs. Huggett, Robinson, Penn, and Braye, the amendment was lost by 26 to 21 votes.

Food, Drugs and Drink,

—THE—

PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, APRIL 1, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE SOMERSET HOUSE CHEMISTS.

OUR contemporary, *The Civilian*, in its issue of March 25th has some very interesting remarks upon the Inland Revenue Laboratory. It will be seen that they, in the main agree with our own upon the question made in our last issue. *The Civilian* says :—

"The prominence recently given to the Inland Revenue Laboratory in the press—particularly in that section of it which is devoted to the interests of the chemists and druggists' professions—reached its climax this week when Mr. Tatton Egerton put a question in the House of Commons, implying that Dr. Bell, the Principal, and Mr. Bannister, the Deputy-Principal of that department, had resigned their positions in the Inland Revenue, in consequence of the proposed introduction of Professor W. Noel Hartley as chief of the Laboratory at Somerset House. A further suggestion was contained in the query that the professor is wanting in experience in practical analytical chemistry.

"It is not clear what gave rise to such an extraordinary notion, unless the paragraph which first hinted at it was inspired by the fact, well known to everyone who takes an interest in Service affairs, that Dr. Bell is scheduled to retire by the end of this year. It is not improbable that those who would like to see so important a post as Principal of the Somerset House Laboratory bestowed on a man unconnected with the department, gave currency to the suggestion in the hope of its taking a more tangible form. We alluded some time ago to the strictures which the governing body of chemists at their last meeting passed upon the certificates given by Dr. Bell in cases of analyses of food products, when they averred that such certificates conveyed a misleading opinion to the public. These certificates appear to have been made the foundation of a very formidable attack against the Government chemists, and out of what, after all, was a matter for simple adjustment, has grown a condition of things which places the laboratory at a disadvantage in an encounter with an outside combination of opponents.

"As regards the reply of the Chancellor of the Exchequer to Mr. Egerton's question, it is, so far as it goes, satisfactory. We are assured that inasmuch as neither Dr. Bell nor Mr. Bannister has resigned, no offer has been made to Professor Hartley of the Principalship of the Laboratory. We are, of course, aware of the value which can be attached to answers given to questions put in the House of Commons. Too much faith is usually placed in the ordinary significance of words, and too little importance is given to the strict interpretation of phrases. However, accepting in the most perfect good faith the idea which appears to be conveyed, that the vacancy which will eventually be caused by the compulsory retirement of Dr. Bell is not to be filled by some more or less distinguished member of the outside world of analytical (practical or otherwise) chemistry, we congratulate the inquisitive Member who has elicited such a forecast."

We are quite in accord with our contemporary as to the inadvisability of such a post being offered to Professor Noel Hartley. Without in any way questioning Professor Noel Hartley's ability, or his able contributions to science, the paths in which he has won honour have absolutely nothing in common with analytical work, such as the Inland Revenue requires. Professor Hartley's researches have been mainly, we believe, in spectroscopic and photographic work, having no relevancy whatever to the analysis of food, drugs, or drink. The chief of the Inland Revenue Laboratory ought to be a scientist of unquestioned capacity, thoroughly practised in general analysis, and in touch with the analytical work of experts in other countries. An ideal selection, from a scientific point of view, for

such a post, would not be difficult to find, and the chemist selected should be able to command the confidence of public analysts everywhere, and bring the widest and soundest chemical knowledge to the service of the department. The Board of Inland Revenue, further, has an opportunity now, very different to that offered when the Food and Drugs Act was passed. At that time very little was known of food analysis, and in the last seventeen years, thanks mainly to the Society of Public Analysts, a great deal has been discovered. It is amongst the ranks of the 'ablest of those who have enriched analytical knowledge by their work, that the Board of Inland Revenue should look for a successor to Dr. Bell.

FRAUDULENT WINES.

In his report on the Wines exhibited at the Vienna Universal Exhibition, 1873, drawn up for Her Majesty's Commissioners, Mr. Henry Vizetelly said, "a medal was awarded to M. Vielhomme for some sparkling red Burgundy, and, singular to say, to M. Soucard, for what he termed 'Champagne of High Life,' a compound of wine and brandy, the latter predominating, in a state of effervescence. Stranger than all," Mr. Vizetelly's report said, "medals for progress and merit were given to MM. Blaquier Fils and Wachter respectively, for their imitation wines, a well-known house in Cette, the hotbed of this nefarious industry, being simply rewarded by honourable mention for its efforts in the same objectionable direction."

"No wine," says Mr. Vizetelly, "is so extensively imitated as Port. It came out in evidence twenty years ago that the average quantity annually exported to this country was 20,000 pipes, while the annual consumption amounted to no less than 60,000 pipes, and in the inquiry made before the Parliamentary Committee respecting the import duties on wine, some startling disclosures were made *à propos* of counterfeit ports, shewing that certain kinds were concocted out of Cape wine, cyder and brandy; others with common French, Spanish, and Sicilian wines and a liberal admixture of raw spirit; others again from Spanish and Cape, or Spanish and Canary, with a moderate allowance of French and Portuguese wines and a copious supply of the all-necessary alcohol. White wines, such as Marsala and Canary, were added in moderate quantities to give to the wine the approved tawny hue. These mixings were made in the London docks, the spurious port being presumably for exportation, but it doubtless frequently found its way back again and passed down the throats of the British public. One of the witnesses produced a book, evidently well known to those for whose benefit it was prepared, having gone through four editions, called the "Licensed Victualler's Guide," and which gave receipts not only for the manufacture of spurious ports, but for communicating a fine crusted appearance to the bottles, and for imparting the requisite look of age to perfectly new corks. Now-a-days," the report continues, "spurious port is produced on a large scale at Tarragona in Spain, which imports considerable quantities of dried elderberries presumably for deepening the colour of, if not actually adulterating the so-called 'Spanish Reds.' A couple of years ago I tasted scores of samples of fictitious ports in every stage of early and intermediate development, rough, fruity, fiery, rounded and tawny, in the cellars of some of the largest manufacturers at Cette, and saw some thousands of pipes of converted Rousillon wine lying ready for shipment to England and various Northern Countries as vintage port."

The public have become so accustomed to adulterated wine that were genuine port and sherry offered to them they would not believe it to be port or sherry. What Mr. Vizetelly found twenty years ago, Dr. Murga, Chef du Laboratoire de Médecine légale, Seville, finds in a worse form to-day. In a report just issued upon wines, Dr. Murga says:—"The wine merchants enrich themselves to the detriment of the health of the consumers. It is known that alcohol derived from wine, or from cereals, contains certain aromatic substances that are part composed of superior alcohols and part of ethers which have no bad influence on the organism. But the alcohol obtained from potatoes and from balm mint contains matters that are hurtful, and above all, amylic alcohol. This last substance is the poison properly speaking, of the Eau-de-Vie of commerce, the harmful action of which on the brain gives rise to delirium tremens."

Dr. Murga finds wines that have their natural acidity corrected by a mixture of alkaline salts, carbonates of lime, soda, and potash. Alum is added to increase the transparency and to give to the wines the styptic savour which they have lost by having had water added to them, or to imitate other more valuable wines. But the greatest fraud, says Dr. Murga, is the addition of water to the extent of doubling or trebling the bulk. Everyone does it. It is only necessary to add the needful quantity of

alcohol, or rather brandy, more or less abominable, and to take care to get the correct colouring matter. Formerly, these colouring matters were infusions of Campêche wood, of Fernambouc, and cochineal, harmless enough, but they are now absolutely abandoned as colouring mediums, and are replaced by aniline colours, almost always impure, and what is worse, injurious to the health. A pleasant picture truly, is this drawn by Dr. Murga from analysis made for the Spanish authorities in his laboratory.

Vizetelly found the producers of these fraudulent wines sent in such enormous quantities to this country would not themselves suffer a bottle of the English market wine to appear on their own tables. Foreign Governments further take some trouble to prevent the introduction into wine for native consumption, of any known injurious substances. Ours does not, but affords us instead the spectacle of the Chief Chemical adviser to the Inland Revenue declaring, in answer to Colonel Hill at the enquiry three years ago on British and Foreign Spirits, that the German potato spirit was as pure and wholesome a spirit as that obtained from wine, that it makes no difference of what material spirit is made, and that if German potato spirit were mixed with English, Irish, and Scotch spirit, it would probably tend to purify it, an advice and opinion which has been followed with profit by the unscrupulous, the more so as the German potato spirit costs from one third to one half the amount Irish, English, or Scotch spirit costs. The amount of trouble the local authorities take to secure pure wine for London, is the analysis of six samples of wine per year; so, for ought the powers that be care, the publican can concoct what he likes and sell it, his only risk being the remote possibility of the Inland Revenue catching him. With such opportunities afforded him, the only wonder is that he does not sell even worse wine than that he now vends, but perhaps he is wise in not making it worse. Were he to do so, the public might be driven from it altogether, so self-interest will doubtless keep the fraudulent wine at its present adulteration point, and the general public will in the future, as they have in the past, read and hear of port and sherry, but seldom see or taste it.

SIR CHARLES CAMERON ON THE ADULTERATION ACTS.

In an address delivered in Dublin last week under the auspices of the Corporation, Sir Charles Cameron, the President of the British Institute of Public Health and of the Society of Public Analysts, drew attention to the way in which the Adulteration Acts were carried out in Dublin as compared with a number of other towns. If, he said, convictions for breaches of the Public Health Act, the Adulteration of Food Act, and the Margarine Act, be taken as a measure of the sanitary work done, then Dublin stands pre-eminent. In 1892, in Manchester, whose population was 510,998, the convictions under the Food Adulteration and Margarine Act numbered 98, and the fines imposed totted up £217 15s. 6d. In Sheffield, population 329,585, the offences against the Food and Margarine Acts were 24, and the fines £44 17s. 10d. In Dublin, population 245,001, there were 96 convictions for the sale of adulterated food, and the fines were £201 9s. 6d., and there were 44 convictions for breaches of the Margarine Act with £199 10s. in fines. In 1891 there were 181 convictions under the Sale of Food and Drugs and Margarine Acts, and the fines imposed amounted to £600. The 46 towns from which information was obtained had a population of 8,468,248. There were 625 convictions for selling adulterated food, and the fines imposed were £1,323 6s. 7d. The convictions under the Margarine Act were 167, and the fines imposed £242 13s. In reference to the Margarine Act, Dublin occupies a very exceptionable position. In 1892 there were 44 convictions for breaches of this Act, whilst in the 46 other towns there were only 147. There is only one town which came up to Dublin in 1892 as to the number of convictions, namely Liverpool, but it must be borne in mind that the population of that city is far more than double the population of Dublin, namely 513,790. In some large English towns there were few convictions. In Nottingham, which is nearly as populous as Dublin, there were only five under the Adulteration Act, and one under the Margarine Act. In Oldham, whose population was 134,221, there were three convictions under the Adulteration Act, and none under the Margarine Act. Leicester, whose population was 180,066, had two convictions for adulteration of food, and none under the Margarine Act. In twenty-five towns there were no convictions under the Margarine Act.

POISONED BY FRIED FISH.—Coroner Macdonald of East London has received information of the death of a boy named Harry Libka. He was given some fried fish which his father was having for dinner, and later both were taken ill. A rash came out on deceased, and though medical aid was summoned, the child died within 36 hours from blood poisoning.

SOMERSET HOUSE ADULTERATION STANDARDS.

A correspondent of the *Pall Mall Gazette* writes:—It is devoutly to be hoped there is truth in the statement that an inquiry has recently been held into the difference of opinion which has existed for some years between Dr. Bell, of Somerset House, and the great majority of the public analysts of the kingdom. There is no analyst but knows only too well how difficult it is to decide whether a poor milk owes its poverty to the niggardness of Nature, or to the dishonesty of the dairyman; only the veriest tyro of the profession would be guilty of a definite statement without having the strongest evidence to support his decision. But supposing you have dared to decide that a sample has certainly been adulterated, how shall you judge the extent of the dairyman's wrong doing? The analysts would take for standard a properly determined average, which any one of them could provide after the experience of a few years. Dr. Bell, upon the other hand, is all for mercy. Having decided that a sample must have been adulterated, he estimates the added water upon the supposition that the genuine milk was originally not of average richness, but of the same quality as the poorest unadulterated milk he ever met with. Now there be some cows which, with mind conscious of doing the best they can, dare to produce a fluid whose temerity would appear iniquitous to all but the most foolishly unscrupulous of dairymen. This milk is the standard that pleases Dr. Bell, and there is no analyst but can tell you of instances wherein milk undoubtedly adulterated has to be classed as genuine because of this fact. It is the same with butter: Dr. Bell is understood to believe that a butter must needs be "genuine" if it was not made to sell. The truth is that the skill and patience of the maker of butter are just as important to the buyer as his honesty: one would as soon pay the price of butter for lard as for water and curd. But Dr. Bell has met with a sample of Cornish butter (Cornish butter, the outcast of the market!) which was made in the dairy of a gentleman for the use of his family alone. It contained a vast quantity of water, and it was "genuine": wherefore (says Dr. Bell, in effect) the farmer is a fool who for the future shall send out butter containing less. Now the farmer is not all a fool; and what is the use, for the present, of peripatetic dairy schools?

FOOD PROSECUTIONS.

At the Borough Magistrates' office, Reading, on the 17th ult., Thomas Pocock, junr., was charged with on the 4th March exposing for sale meat which was unsound and unfit for the food of man, and ordered to be destroyed by a Justice. Mr. Sidney Brain defended, and defendant pleaded not guilty. Mr. Henry Day (Town Clerk) prosecuted, and said the case was very important in the interest of the public, and especially the poor of the town. Mr. W. H. Robertson, Inspector of Nuisances, said about noon on the 4th his attention was called to meat on defendant's stall in the Market-place, which was very black looking. He asked defendant if it was horse-flesh, and he said no, it was a cow which he had slaughtered at Patey's Farm, Pangbourne, adding that he did not know why it was slaughtered at the farm. About four he returned, and, having made a more minute examination, sent for the Medical Officer of Health, on whose instructions he seized 27 pieces, weighing 112 lbs. Mr. James Simonds condemned it. It was very dark and flabby, and gave off a peculiar odour. Mr. Hamilton, Mr. Robertson's assistant, and Mr. Tewsley, head constable, said the meat was unfit for human food. Dr. Ashby, medical officer of health, stated that the meat was utterly unfit for human food. It appeared to be meat of an animal that had suffered from a wasting or febrile disease, and would be injurious to health if eaten. Mr. James Patey, Marsh Farm, Pangbourne, said defendant killed the cow at his farm on March 2. It had been falling down and suffering, but he did not know what was the matter with it. Defendant paid him nothing for it. It had been a capital cow, yielding 15 to 20 quarts of milk a day up to the previous Tuesday. Cross-examined.—A cow could not be ill to give that quantity of milk. She had not shown any sign of disease. He thoroughly examined the intestines, &c., and there was no trace of disease. It was hurt on the Tuesday. Mr. Brain ably addressed the Bench for the defence, urging that Mr. Patey's evidence showed the meat was unfit for food, and called Frederick Cox, Mr. Patey's dairyman, who said Mr. Patey had had this cow about 18 months. It had never suffered from illness or disease. This cow yielded ten quarts on the Tuesday morning. He saw the accident about 10 a.m. on Tuesday. The flesh was good; witness had "a bit of skirt" himself, and it was very good. Edward Gash, butcher, said he saw the cow slaughtered. It was all right. The meat was a bit dark, but otherwise all right. The Chairman said the Bench were unanimous in convicting. In the interest of the public health it was most important that the law should be vindicated; and the least they could do, for the protection of the public and as a warning to others, would be to fine defendant £10, and £1 4s. 6d. costs, or 14 days. A fortnight was allowed to pay.

SPURIOUS CONDENSED MILK.

IMPORTANT CONVICTIONS.

It was Mr. C. E. Cassal who first, a few years ago, called attention in his reports to the Battersea Vestry to the dangers attending the use of condensed skimmed milk. We are glad to see that the warnings given by Mr. Cassal, which we have emphasised to the readers of this journal, have at length been productive of good results. On the 23rd ult., at the West London Police Court, Mr. Curtis-Bennett heard summonses taken out at the instance of the Kensington Vestry against persons for selling tins of condensed milk which had a large quantity of the fat abstracted. The first was against Catherine Rusdell, of Golbourne-road, the quantity of fat abstracted from the sample of milk sold to the inspector amounting to 90 per cent. Mr. Chambers Leete, who supported the summons, said it was really separated milk, the fat having been abstracted by mechanical means. The tins bore the notice, "Skimmed condensed milk," but he thought that was not a sufficient disclosure of the alteration. Mr. Cassal, the public analyst for the parish, was called, and said it was impossible to skim off so much as 90 per cent. of the fat. As a rule in genuine skimmed milk the quantity of fat which could be abstracted was 55 per cent., but some authorities went so far as 65, of course by a process of repeated skimming. His own experience went to 55 per cent. Mr. Grain, for the defendant, submitted that the notice was sufficient, as the defendant was charged with abstracting the fat. Mr. Curtis-Bennett was of opinion that the notice was not a proper description, and fined the defendant £5, with 12s. 6d. costs. Thomas Geden, of Silchester-road, was also fined £5, with the amount of costs, the percentage being 90 per cent. of abstracted fat. We would particularly direct the attention of grocers and Food and Drugs Act inspectors to the important point on which this conviction was obtained. We were the first to point out that it was an untrue declaration to call a milk deprived of 90 per cent. of its fat a "skimmed milk," inasmuch as skimming could not possibly remove that much of the fat. This, as Mr. Cassal showed in his evidence was the case, and the labelling of substances having 90 per cent. of the fat abstracted as "skimmed milk," is therefore an untrue declaration and to the prejudice of the purchaser. Grocers would do well to take warning from these prosecutions, and leave the sale of such dangerous articles severely alone. Were they only used for mixing with tea or coffee they would be open to very little objection, but their large use as infants' food constitutes a serious public danger, inasmuch as their nutritive value is almost nil, and that nutriment is present in the most indigestible form. When it is further noted that the sale of these spurious condensed milks has been condemned by many hundreds of the most eminent medical authorities, including Sir Dyce Duckworth, Mr. Jonathan Hutchinson, and Sir Andrew Clark, then there can be no real excuse alleged for their continued sale, and all who are concerned with the preservation of the high character of the grocery trade and the public welfare, must view the success of these prosecutions with satisfaction. It is cheapness and cut-throat competition that is making the grocery trade one of the hardest in which to make a living, and of all forms of cheapness this spurious condensed milk is the most objectionable.

IMPORTANT TO MINERAL WATER MANUFACTURERS.

At the West London Police-court, on the 23rd ult., summonses were heard under the Food and Drugs Act with respect to the sale of soda-water which was not of the nature and substance demanded. These were the first of the kind in this district, and were regarded as test cases. In the case of Mr. Turnham, of the Station Hotel, Churchfield-road, Acton, it was stated that the soda-water sold to the inspector was simply carbonated water, containing no bi-carbonate of soda. Mr. Cornwall, who defended, said soda-water was manufactured in various ways, there not being any law regulating it. He gave a description of the way in which the soda-water was manufactured and sold to the defendant. He said that there was a preparation of gas from bi-carbonate of soda, which was injected into the water, and with the escape of the gas on the cork being withdrawn there would be an escape of bi-carbonate of soda. He submitted that it fully answered the description of soda-water. Mr. Curtis-Bennett gave a decision against the defendant, observing that it could not be soda-water, inasmuch as there was no soda in it. The thing ought to be sold under the name of carbonated water. He imposed a penalty of 10s., with 12s. 6d. costs.

Mr. John Ford, of Ye Hostelry, Turnham-green, who is also landlord of the Roebuck, High-road, Chiswick, appeared to answer two summonses for soda-water sold to the inspector at each house. The article sold being of the same description, a penalty of 10s., with 12s. 6d. costs, was imposed in each case.

ADULTERATION PROSECUTIONS.

MILK.

Benjamin Suckling, milk vendor, of St. Leonard's-road, Windsor, was summoned at the Windsor County Petty Sessions for selling adulterated milk at Eaton, on 10th Feb. There were two informations. Mr. Clarke, solicitor, of High Wycombe, was for the prosecution, and in opening the case asked that a substantial penalty should be inflicted, as a small fine would be less than the profits arising from the adulteration, and would not, therefore, have a deterrent effect. Superintendent G. Sutton deposed to obtaining a quantity of milk from a man named Surman in the employ of defendant, and sealing three samples in his presence—one sample for the public analyst, one for the defendant, and one produced. The analyst's certificate showed that the milk was adulterated by the addition of 15 per cent. of water, and that the specific gravity was 1.028, while that of pure milk was 1.035. Police-constable Gascoign, Slough, and Wallace Surman, defendant's carrier, gave evidence. In cross-examination by Mr. Rickett, who appeared for the defence, Surman said he took the milk out exactly the same as he brought it from Windsor station, without the addition of water or extraction of cream. Mr. Rickett said the defendant was a victim himself, and had been imposed upon. The milk was sent out in precisely the same condition as it was received from the farmers at Wheatly. The defendant was called and said he did not keep cows, but depended for a supply of milk upon a firm of milk contractors in London. By arrangement he got the milk straight from farmers at Wheatley and Tiddington in Oxfordshire. He (defendant) had samples analysed. He swore that he sent the milk out just the same as he received it. He had 1,100 or 1,200 customers. Alfred Walter Stokes, public analyst for four parishes in London, called for the defence, said he analysed 20,000 samples of milk a year. He analysed one of the samples in the present case, and found 13 per cent. addition of water. He found considerably more fat than was stated to have been found by the public analyst. The Bench said they must protect the public, and convicted the defendant under the 6th section of the Act, fining him £10, including costs. Mr. Clarke said that under those circumstances he would ask the permission of the bench to withdraw the second information. Withdrawn.

On the 14th ult., at the Southampton Police-court, Walter Leggett, living in Russell-street, for whom Mr. C. Lamport appeared, was summoned for having on the 1st ult. sold to William George Powell, an inspector of nuisances, milk which was not of the nature, substance, and quality demanded, having 40 per cent. of added water. The Town Clerk (Mr. R. S. Pearce) handed in the certificate showing the adulteration, and Mr. Lamport pleaded guilty, stating that he appeared not only for the defendant but the Southampton Dairy Company, Above Bar, who were interested in the case, and desired the facts to be known. The defendant was a customer of theirs, and what had happened would be the subject of proceedings in another court. The Southampton Dairy Company had an agreement with a farmer to supply them with milk, and attached to each churn sent was a ticket of warranty that it was pure new milk with all its cream. The defendant was a customer of the company, and for the sake of convenience attended the railway station, from which he took the milk direct to his place. That milk was found to be adulterated, but defendant had no knowledge of it. The defendant could not avail himself of the defence of the warranty, because it was not given to him, but to the Dairy Company, though had the assignment been from the farmer to the defendant the warranty would have been an answer to the case. Therefore, the defendant was technically guilty, though morally he was not. In justice to the manager of the Dairy Company (Mr. Pocock) he should say that he had taken steps to have other samples analysed, and had given notice to the officers. In consequence of the analysis Mr. Pocock found that he had cause to complain in other instances, and had refused to take any more milk from this particular farmer. Mr. Leggett was extremely sorry that his name should be mixed up with such proceedings of this sort, and Mr. Pocock was more sorry. Mr. Pocock said that the statement made by Mr. Lamport as to the facts were correct. The Bench remarked that there was no doubt the defendant was, legally speaking, responsible, but they would only impose the nominal penalty of 10s., and costs 11s. 6d.

At Maidstone Police-court, on the 13th ult., Albert Brooker was summoned for selling adulterated milk on 3rd February. Mr. S. L. Monckton appeared to prosecute on behalf of the Maidstone Urban Sanitary Authority, and Mr. A. J. Ellis defended. Mr. Monckton, in opening the case, said the proceedings were taken under sections 6 and 14 of the Food and Drugs Act of 1875, and that Mr. Jackling, inspector to the authority, purchased one pint of milk from defendant in the streets, divided it into three parts, giving one to the defendant, one to the public analyst, and kept one himself. Mr. Jackling stated that he saw defendant selling milk in Well-road on February 3rd, and he bought a pint of new milk and paid 2d. for it. He told defendant he wanted it to be analysed. Cross-examined by Mr. Ellis, he said Brooker drew the milk in a measure which belonged to him (Mr. Jackling), and asked defendant whether he would have it divided into three parts. He divided it, and sealed one bottle up in the presence of Brooker, and handed it to him. The other two he did not seal up; he took one to the analyst himself. The analyst's certificate showed that the milk contained 13 per cent. of water. Mr. Ellis, in defence, contended that no evidence had been called to prove the service of the summons, and quoted section 10 of the Amendment Act of the Food and Drugs Act, which showed that a prosecution for adulteration under a summons to

appear before the magistrates shall be served, in the case of perishable goods, within a period not exceeding twenty-eight days from the time of purchase. As no evidence had been called to prove that this had been done, he asked the magistrates to dismiss the case. He said the purchase was made on the 3rd of February, and then Mr. Jackling let eleven days elapse before he laid information. They were a day behind the time. Mr. Monckton said that the defendant had appeared in court, and if the summons was out of date the defendant should not have turned up. If the defendant had not appeared he would then have had to prove that the summons was served in proper time. After a short discussion the case was adjourned.

On Wednesday, the 15th ult., before Mr. W. J. Stewart, at the Liverpool Police-court, fines of 10s. and costs were imposed on Thomas Harker, milk dealer, 8, Cowl-street, for exposing for sale milk to which water had been added in the proportion of five parts for every 100 parts of the poorest milk; and on Stephen Evans, milk dealer, 1, Doddridge-street, for selling skim milk to every 100 parts of which five parts of water had been added. Two informations were laid against Margaret Boardwood, 35, Northcote-street, for selling milk to every 100 parts of which 18 parts of water had been added, and for selling milk to which water had been added in the proportion of 23 parts to every 100 parts of the poorest quality. A fine of 20s. and costs was imposed in each case. The cases were proved by Inspector Baker.

On the 16th ult., at the Dublin Southern Divisional Police-court, before Mr. Swift, some cases in which the guardians of the South Dublin Union summoned several milk contractors on the alleged ground that they had supplied milk adulterated with water, were disposed of. They had been before the magistrate, but were adjourned in consequence of legal questions raised by counsel for the defendants. Mr. M'Sheehy, who represented the Public Health Department, now said that since the adjournment he had been considering those cases, and that, having regard to Sir Charles Cameron's statement that he could not say he took a personal part in the analysis, and to the decision of the late Baron Dowse, he thought it right to make a few observations. The magistrate observed that it was perfectly clear that Sir Charles Cameron did not make the analysis at all, and, therefore, did not take steps precedent to the issuing of summonses, and so, even if the samples had been sent to Somerset House, he (Mr. Swift) did not think it could have been held that the proceedings were properly taken. Mr. Keogh, for the defence, said that Mr. M'Sheehy saw there was only one course open to him, but he complained that a number of men—twelve—for whom he appeared, who had large contracts, amounting to about £500 a year, should have summonses launched on them in this way. These cases involved serious consequences. Certificates were issued of analysis which in point of fact had not taken place. He knew Sir Charles Cameron was incapable of doing anything wrong in such a matter. Mr. Swift observed that Sir Charles was an able analyst, but he did not pretend to be a lawyer. Mr. Keogh said that was so; but the analysis had not been made by Sir Charles Cameron. The consequence to his clients might have been fines to the amount of £240, not to speak of the tremendous injury to them otherwise. His clients' sureties were responsible for considerable amounts had they been sued on the securities. He asked his worship to dismiss all the cases, and with costs in each case. The magistrate awarded 30s. costs in each case.

Walter Arnold, manager of the Farmer's Direct Supply Dairy Company, 52, College-place, Chelsea, appeared to an adjourned summons at the Westminster Police-court, on the 16th ult., charging him with selling adulterated milk. The case was adjourned on the previous occasion to enable defendant, who said he sold the milk as he received it, to have an independent analysis made. This had now been done, and the analysis confirmed that previously made, viz. that there was thirty per cent. of added water. Fined £5, and 23s., costs.

At Middlesbrough on the 20th ult., Robert Greet, 13, Trent-street, was charged with selling adulterated milk. Mr. T. M. Barron defended. Mr. Anderson, inspector of nuisances, said he took a sample of the milk, which he submitted to Mr. Stead, the borough analyst, for analysis, who found that it contained 7½ per cent. of water. In answer to Mr. Barron, witness said previous samples had been found all right. For the defence, Mr. Barron said that the rather large percentage of water contained in the milk might easily be accounted for by the state of the cow. Fined £2 2s., including costs.

John Wingrove, milkman, of Horley, was summoned before the Reigate County Bench, on the 12th ult., for unlawfully selling, on the 31st January last at Horley, one pint of new milk, which was not of the nature, substance, and quality demanded by the purchaser, the same having been diluted with 13 per cent. of water. Defendant did not appear. Mr. Cliffe, an inspector under the Food and Drugs Act, stated that he was on the main Brighton-road, between Horley and Redhill, when he saw a cart belonging to the defendant stop at a house, and the person in charge of the vehicle take in a can, and apparently serve milk there. Witness then stopped the person and asked to be served with a pint of milk. He was served with it, and he paid 1½d. for it. Witness told him he had purchased it for the purpose of having it analysed, and he then divided the sample into three parts, giving the person in charge of the vehicle one, keeping one himself, and the third he sent to Dr. Stevenson, the public analyst. Mr. Cliffe then handed in a certificate from the latter, showing that there had been added 13 per cent. of water. Witness afterwards saw the defendant, who stated that he had also had his sample analysed, and that it contained rather more than 13 per cent. of water. A fine of £3 and costs was imposed, or in default distress or seven days.

At the Woolwich Police-court, on the 11th ult., Mrs. Herring, 64, Prospect-place, Woolwich, summoned by the Local Board, for selling milk adulterated with 8 per cent. of added water. Mr. Bryceson prosecuted. There was a second case of selling the same milk with 22 per cent. of cream abstracted. Mr. Kennedy fined her £4 and costs.

Mrs. Turpin, 22, Trinity-street, Woolwich, summoned for selling milk with 6½ per cent. of added water, and 37 per cent. of cream abstracted. Fined £4 and costs.

On the 21st ult., Stephen Nunn, of 14, Carlton-hill, was summoned before the Brighton Borough Bench, for having sold a pint and a half of milk adulterated with not less than 25 per cent. of added water to the prejudice of the purchaser, on the 25th February. Mr. Hugo Talbot, Deputy Town Clerk, appeared in support of the summons, Mr. Kerridge defending. Alfred Adser, of 32, Ashton-street, stated that on the day named, by the desire of Sanitary Inspector Cuckney, he purchased a pint and a half of milk of one of the defendant's men. He asked for a "pint and a half of milk, new." He was served with the milk, and asked the man what the "damage" was, and he said 2½d. Replying to Mr. Kerridge, witness said he asked for new milk. The inspector afterwards came up and said the milk had been purchased for public analysis. Inspector Cuckney corroborated, and stated that in the presence of the defendant's man he divided it into three parts, each of which he sealed up, giving one to the man, retaining one, and handing the other one over to the public analyst, whose certificate showed the milk to have been adulterated with not less than 25 per cent. of added water. Mr. Kerridge, for the defence, submitted that the water "got there," but asserted it was after the milk had left his client's premises, and Mr. Nunn was in no way a party to it. There were three previous convictions against the defendant for selling adulterated milk. He was now fined £10 and costs, or a month's imprisonment.

At the Thames Police-court on the 24th ult., before Mr. Dickinson, Edward Baker, of 14, Harding-street, E., was summoned by Frederic Lyon, inspector under the Food and Drugs Act to the Vestry of Mile End Old Town, for selling milk, adulterated with 25 per cent. of added water. Defendant stated, after the evidence of the inspector as to the purchase, that trade being bad he could not afford to sell pure milk at the price, so that he added some water to make it up. The magistrate imposed a fine of £4, and 23s. costs.

William Hickman, of 63, Shaftesbury-road, was summoned for selling a pint of milk adulterated with not less than 14 per cent. of added water, on the 2nd ult. The milk was purchased of Messrs. Hickman by a clerk in the Sanitary Office. The inspector produced the analyst's certificate, showing the milk to have been adulterated with not less than 14 per cent. of added water. It was not, however, deficient in butter fat. In this case Mr. Kerridge, who defended, called the defendant and others to show that "new" milk was not asked for by the purchaser, and that it left the defendant's house in exactly the same condition as it was received. Fined 10s. and costs, or fourteen days.

Alfred Bailey, of 130, Albion-hill, was summoned under similar circumstances, the milk in this instance being, according to the analyst's certificate, adulterated with the addition of 15 per cent. of added water. In defence Mr. Bailey said he sold the milk in the same condition as he received it. A fine of 4s. and costs was imposed.

At the Southwark Police-court on the 18th ult., Augustus Norman, of 49, Yalding-road, Bermondsey, was fined £3, and ordered to pay 12s. 6d. costs, for selling milk adulterated with 22 per cent. of added water, the case being proved by Mr. H. Thomas, sanitary inspector to Bermondsey Vestry.

James Cheshire, of Spa-road, was fined a like amount for a similar offence, the analyst's certificate showing that the milk contained 18 per cent. of added water.

BUTTER AND MARGARINE.

In Dumfries Sheriff Court on the 14th ult., Sheriff Campion disposed of a number of prosecutions under the Food and Drugs Acts. The complainer was Mr. M'Kirdy, inspector under the Acts, and Mr. Jonathan E. Blacklock prosecuted. James Cleworth, grocer, was charged with having, on 10th December, sold half-a-pound of margarine, by the hands of a salesman at his shop, Nos. 5 and 6, Queensberry-square. Mr. William Moodie, solicitor, in tendering a plea of guilty on behalf of accused, said the plea was a purely technical one. Mr. Cleworth did not admit that he was to blame to any great extent, because the sale was made by a young shopman, and he pointed out that the Food and Drugs Act did not afford the protection to the master which the Margarine Act afforded, it being there relevant to shew that the assistant had been cautioned against selling anything but what was asked for. It seemed to Mr. Moodie that this was an unnecessarily harsh course, seeing there was only one act of purchase; and he pointed out also that that purchase was made on a Saturday evening, when the shop was busy, and that it was undoubtedly a custom in the town for people to ask for butter when they really wanted margarine. He also mentioned that accused had borne a share of the expenses in the recent appeal to the High Court. The Sheriff said it did not seem to him a good case when they found the messenger sent by the inspector receiving articles both of which turned out different from what they were represented to be. He imposed a fine of £5, with 26s. of expenses.

Mrs. Elizabeth Lindsay or Shearer, grocer, Queensberry-street, pleaded guilty to selling half-a-pound of a mixture of margarine with butter by the hands of a saleswoman on the same date. Mr. Thomas M'Gowan, solicitor, made a statement similar to Mr. Moodie, and explained that Mrs. Shearer had never been in the habit of keeping margarine in her shop, but had bought a small kit in response to a

demand for it at Christmas. The article was only in her shop for seven days, and she had not had any since. When asked for margarine she was in the habit of sending out for it in order to oblige her customers. That sold as charged was the best class of margarine, for which she paid 9½d. per lb. and sold at 1s., making about the same profit from it as from butter. Mr. Blacklock stated that the percentage of margarine in the composition was 90 per cent. The Sheriff imposed a fine of £3, with 26s. 6d. of expenses.

Mrs. Elizabeth Beaully or M'George, grocer, gave the same plea to a similar charge, the offence being committed at her shop, No. 40½, North Queensberry-street. Mr. T. M'Gowan explained she was in a small way of business, and really kept nothing else but margarine in the shop. Her business was such that the stock would not realize anything like £5 if that sum were to be imposed as a penalty. Her husband, who was employed by the railway company, had been off work for ten weeks. She stated that people coming into her shop knew very well that she dealt in nothing but margarine, and in this case the labels and everything with the exception of the paper in which the article was wrapped were correct. As was stated in the prosecution some time ago, people did not like to have the article wrapped in a paper marked margarine. Mr. Blacklock stated that the percentage of margarine here was 85, but admitted it was a hard case. A fine of £2, with 26s. 6d. of expenses, was imposed.

James Creighton, grocer, tendered a plea of guilty to a charge of selling half-a-pound of margarine for butter in his shop, 44, English-street, on 18th December. Mr. William Thompson, solicitor, stated that accused was led to believe from the statement of the "decoy" used by the inspector, Mr. M'Kirdy, that what she wanted was margarine, not butter, and he served her from a tub marked margarine, and also told her it was margarine. The Sheriff: That is practically not guilty. Mr. Thomson said it was not guilty so far, but there was the fact that the article was not supplied in a paper marked "margarine." He complained that advantage was taken to make the purchase when Mr. Creighton was in the shop alone, and emphasised Mr. Moodie's point that it was made on a Saturday night. It was, of course, no use in Mr. Creighton coming into court and making the statement which he put forward in the face of the denials which would likely be made by the parties used as "decoys" by the prosecution. Mr. Thomson also emphasised the custom in town as pointed out by the other agents. People knew they could not get salt butter at the price. Mr. Blacklock stated that nothing was said or indicated about margarine, and he also pointed out that Mr. M'Kirdy had got salt butter in town at one shilling per lb. A fine of £5, with 26s. 6d. of expenses, was imposed.

Edwin Terry, of 49, Harford-street, was summoned at the Thames Police-court, on the 24th ult., by Frederic Lyon, inspector under the "Margarine" Act to the Vestry of Mile End Old Town, for exposing "margarine" for sale, without being labelled as such. Defendant pleaded that he had only been in London a fortnight, and handed his return ticket from Plymouth to his lordship in proof of his statement. In reply to a question from the magistrate, the inspector stated that it was not a very large shop, and he did not think defendant had been there very long. Mr. Dickinson said he thought that perhaps there was special circumstances in defendant's favour, and imposed a fine of 10s., and 2s. costs, and advised him not to get into trouble again.

At the same Court on the 24th ult., Miss Rice, of 129, Charles-street, Stepney, was summoned by James Twaits, inspector under the Margarine Act to the Vestry of Mile End Old Town, for exposing for sale a quantity of margarine without being labelled in the manner required by the Act. The inspector in the course of his evidence produced the wrapper in which the margarine was served to him. The magistrate (Mr. Dickenson) examined the wrapper, and remarked that the word margarine was certainly printed on the wrapper, but, in addition, the words—"Try our noted mild cured bacon," the whole being printed in a circle, the word margarine was not easily noticed, consequently, he thought, that the part of the section requiring the wrapper to be legibly marked had not been complied with. The defendant (who was in a small way of business) was fined £1, and 23s. costs.

At Aston, on the 22nd ult., a shopkeeper, named Jane Medlicott, residing at 33, Alma-street, was charged with exposing a quantity of margarine for sale, without the same being labelled as such, on the 25th Feb. Benjamin Bolt, inspector under the Food and Drugs Act, said he called at the defendant's shop on the day named and purchased half-a-pound of what purported to be 1s. 3d. butter. On a portion being submitted to the county analyst he found that it was adulterated to the extent of 90 per cent. Defendant produced bills to show that she had bought the compound as Dorset butter at 1s. per lb. and selling at 1s. 3d. Defendant was fined 20s. without costs, the Bench pointing out that she might bring an action against the man who sold her the compound as butter.

Albert Taylor, 12, Albert-road, was summoned for a similar offence on the 25th Feb. In this case Inspector Bolt purchased the alleged butter at the rate of 1s. 3d. per lb. It was found to be adulterated 50 per cent. Defendant's wife appeared, and said she purchased the mixture at 1s. 1d. per lb. She bought it as pure butter and sold it as the same. Fined 20s. without costs.

Edward Lawden, 39, Alma-street, was summoned for a similar offence on the same date. Fined 20s. without costs.

At Belfast, on the 14th ult., James Lewis, 18, Newtownards-road, was summoned by David McMaster, inspector of food, &c., for selling butter which was found on being analysed by Prof. Hodges, to contain 50 per cent. of margarine. Mr. McErlan appeared for the defendant, and Mr. Spiller prosecuted. A fine of £5 and costs was imposed, this being the second offence.

LARD.

At Durham County Police Court, on the 15th ult., before the Rev. A. D. Shafto (in the chair), the Earl of Ravensworth, Rev. W. Greenwell, Dr. Fenwick, and Captain Apperley, Anthony Hall was charged with an offence under the Food and Drugs Act, at Kelloe, on the 21st February. Mr. B. Scott Elder, inspector of weights and measures for the county, prosecuted, and Mr. Geipel, of West Hartlepool, defended. Mr. Elder said that defendant was a grocer and provision dealer, having numerous branches in the district. He was charged with selling half-a-pound of lard which on being analysed was found to contain 7 per cent. of beef fat. Mr. Elder pointed out the fact that it was not generally known that a grocer charged with an offence under this Act could relieve himself of all responsibility in these matters simply by producing a warranty that the lard had been purchased as genuine lard. George Wilson, assistant to Mr. Elder, stated that he went to the defendant's shop at Killoe and purchased half-a-pound of lard, for which he paid 3½d. Witness divided the lard into three parts, one of which he sent to the county analyst. Mr. Stock, county analyst, said that as beef fat was not part of pig it should not be mixed with lard. The American lard cost 65s. per hundredweight, whilst beef fat cost only 48s. 6d. for the same quantity. The latter was not so nutritious as lard. The percentage in the present case was very small. Mr. Geipel said that a certain kind of beef fat needed to be put in the lard to stiffen it. There had been a similar case tried at Newcastle, which the magistrates had dismissed. Mr. Elder said that he had had various cases of this kind, and, although they were defended, fines were imposed in every case. The Chairman said that it appeared to him that the case had been proved. Defendant would be fined £2, including costs.

James Scott, also of Kelloe, was summoned for selling adulterated lard on the 20th February. Mr. Scott-Elder said it was a very serious case, as the lard contained 20 per cent. of beef fat. Defendant said he sold the lard thinking that it was pure. The Chairman said this was no excuse, and he would be fined £1 and costs.

At Ashby-de-la-Zouch Petty Sessions on the 18th ult., John Burn, a grocer, of Bardon, was summoned for selling lard adulterated with 40 per cent. of cotton-seed oil at Bardon, on the 16th of February. The defendant admitted that his wife sold the lard to Superintendent Holloway, and said that she distinctly told him that it was not the best lard. In answer to that the "policeman" said "You bought it to sell it," and, defendant now added, "Of course we did." Superintendent Holloway stated that he was an inspector under the Adulteration Act for the division. Through an agent he purchased a pound of lard at the defendant's shop at Bardon. The agent was his son, from he received the lard just outside the shop. He (Superintendent Holloway) afterwards went into the shop with his son and saw Mrs. Burn, and placing the lard on the counter said to her, "You have just sold this boy this lard." She replied "Yes." He said to her, "I am the inspector under the Adulteration Act for this division, and the lard has been purchased for the purpose of its being analysed." Further he told her that it would be divided into three parts, one of which he would forward to Dr. Emmerson, the county analyst, one he would leave with her, and the third part retain. The latter he produced in court. He delivered one part to the county analyst. Mrs. Burn told him that the lard was bought by her husband at Coalville. They were "out" of lard when her husband bought it. He (Superintendent Holloway) paid 7d. for the pound of lard, and produced Dr. Emmerson's certificate. The Magistrates' Clerk read from Dr. Emmerson's report certifying that the sample of "lard" delivered by Superintendent Holloway contained 40 per cent. of cottonseed oil. Canon Beaumont: What is the usual price of lard—does it vary? Superintendent Holloway said that for some lard he purchased that day he paid 8d. per lb., but at the defendant's shop he paid 7d. Defendant: We didn't sell it for pure lard. Canon Beaumont: Mrs. Burn didn't say anything of the quality of the lard—simply that it was bought? Superintendent Holloway: She did not say it wasn't the best lard. Superintendent Holloway further pointed out that the transaction had been made by his son, and that was before the conversation he had with defendant's wife. Superintendent Holloway's son was called, to whom Canon Beaumont directed the question: Did Mrs. Burn say anything to you about the lard when you bought it? The boy (decisively): No, sir! The defendant was thereupon fined 10s. 6d. and 14s. costs.

At Dumfries, on the 14th ult., James Cleworth, grocer, was charged with selling half-a-pound of lard which contained 35 per cent. of cotton-seed oil. The Sheriff, Mr. Campion, fined the defendant £5, and 21s. costs.

CHEESE.

At the Wigan Borough Police-court, on the 16th ult., before Messrs. R. Worsley, A. Barlow, and J. Cheetham, William Batty, of 26, Pool-street, Manchester, was charged under a warrant with selling to the prejudice of Mr. John Summer, inspector of Food and Drugs, a certain article of food, to wit cheese, which was adulterated with foreign fats, and was rancid, and was not of the nature, substance, and quality demanded by the purchaser. Mr. Lees, who appeared for prisoner, pleaded not guilty on his behalf. Mr. T. Cowburn, deputy town clerk, said prisoner had only just been arrested, and both the town clerk and the inspector, who were away on business, had no idea of the arrest. He, therefore, asked that the hearing of the case be adjourned. (Mr. Lees said his client was prejudicially being placed in what they called an unlawful position. It was very unfortunate, but it was not their fault, that they were there that morning. They contended it was an unlawful arrest, and that the proceedings were altogether unlawful. They said further that the alleged disrespect to the summons was no disrespect at all.

Prisoner was then remanded until Monday, and was allowed bail on his own recognizances. The opening of the case, it will be remembered, was heard at the Wigan court on the 19th January, and as the prisoner did not put in an appearance, a warrant was issued, but his arrest did not take place until Thursday.

COFFEE.

At Dumfries, on the 14th ult., James Little, grocer, was fined £2, with £1 17s. of expenses, for having by the hand of his wife, sold to prejudice of the inspector four ounces of a mixture of coffee with chicory, in his shop at No. 18, South Queensberry-street. It appeared that the inspector sent a woman and a boy, who were examined for the prosecution some time ago, into the shop; that she asked Mrs. Little what her coffee was; and on being told the price was a penny per ounce, asked for a quarter of a pound. When she was putting down the money to pay for it the boy left her, and the inspector entering the shop, claimed the purchases (sugar and half-a-pound of butter were also bought) for analysis. The percentage of chicory was 40. In answer to Mr. Geddes, solicitor, who appeared for the accused, Mr. McKirdy, the inspector, said he knew pure coffee could not be got at the price paid for the article in the present case.—For the defence Mrs. Little, corroborated by accused, said she had stated to the woman that she had nothing but "penny an ounce" coffee. She used to keep pure coffee, but she could not sell it.—Mr. Geddes argued that the article could not have been sold to the prejudice of the purchaser (Mr. McKirdy), seeing he knew what he was going to get for the money tabled. The Sheriff, in imposing the penalty indicated, said he did not think there was any serious intention to defraud, and that the case was only one of simple negligence in not observing the formalities of the Act. People who dealt in these articles must, of course, simply obey the Act.

At the Southwark Police-court on the 18th ult., Edward Nott, of Yalding-road, for selling coffee adulterated with 40 per cent. of chicory, was fined 20s. and costs.

WHISKY.

At the Thames Police-court, Miss Rainbird, of 2, High-street, Stepney, E., was summoned by Frederic Lyon, Inspector under the Food and Drugs Act to the Vestry of Mile End Old Town, for selling Whisky 38 degrees under proof, being 13 degrees below the limit allowed by the sale of Food and Drugs Act, Amendment Act 1879. Defendant pleaded guilty, and the magistrate imposed a fine of £3, and 23s. costs.

At the Epsom Petty Sessions on the 13th ult., before Mr. W. R. G. Farmer (in the chair), Sir Wm. Vincent, Bart., Mr. W. E. Chambers, Mr. S. M. Richards and Colonel Gleig. Mary Ann Weale was summoned for selling adulterated whisky. A half-pint of whisky was purchased at the Windsor Castle Inn at Little Bookham, kept by the defendant. On being analysed the whisky was found to be 2½ per cent. below the 25 per cent. allowed by law. Defendant stated that it was probably the fault of the spirit merchants. The Bench imposed a fine of 2s. 6d. and costs.

RUM.

At Durham on the 15th ult., George Lamb pleaded guilty to selling a pint of rum adulterated with water, at Kelloe, on the 20th February, to George Wilson. Mr. Scott-Elder put the analysis in, stating that the rum was adulterated to the extent of 10·8 per cent. Fined 5s. and costs.

Henry Taylor was summoned for a similar offence at the same time and place. Defendant's wife appeared, and stated that she was ill at the time the rum was served, and that it was put up by her son. The analysis showed the rum was adulterated to the extent of 8·60 per cent. Fined 5s. and costs.

TINCTURE OF RHUBARB.

A novel case under the Food and Drugs Act, and the first of the kind brought in the district, was heard by the Huddersfield County Magistrates on the 21st ult., in which Mr. A. L. Bridge, a West Riding inspector under the Act, charged Sam Bamford, an assistant to the Golcar Co-operative Society, with selling tincture of rhubarb which was proved to have been adulterated. Mr. J. Foster Brook defended. A part of the drug bought by the inspector at the stores had been analysed by Mr. Allen, of Sheffield, who found that it contained half the proper amount of extract, and three-quarters of the proper alcoholic strength. The officer asked for exemplary punishment, as the drug was a stomachic. A technical objection was submitted by Mr. Brooke, who afterwards addressed the Bench. A fine of 40s. was imposed, and the costs amounted to 21s.

TINNED MEAT POISONING.

A few days ago, Mr. and Mrs. Wm. Coleman, who live in the Baddow-road, Chelmsford, and formerly occupied Rolleston's Farm, Writtle, and several members of their family partook at breakfast of some tinned meat, purchased at an establishment in the borough. They were soon afterwards attacked with vomiting and diarrhoea, indicating that they had eaten of something of a poisonous character. Mr. Ernest Coleman, a son, was seized with graver symptoms, and was at one time considered to be in a critical state. Dr. Carter, first, and subsequently Dr. Lewis were called in, and now they are all on a fair way to recovery.

ALUM IN BAKING POWDER.

Since we, on the occasion of the Ilkeston prosecution of August 25th, pointed out the harmful effects of "alumed" baking powders, public attention has been increasingly directed to the question by means of controversy in trade journals, experiments in various analytical laboratories, and comments in the press in various parts of the country. One journal, *Industries*, not content with supporting our opinions, has gone further, and condemned *holus bolus* all baking powders, saying, under the sensational heading,

"POISONOUS BAKING POWDER."

"Imperfect grasp of principles has led to the belief that because the aerating agent evolved by the growth of ordinary yeast is carbon dioxide, any substance capable of liberating that gas under the conditions obtaining during the operation of baking must be an efficient substitute for the life processes of the living cell. To this particular piece of crude reasoning are due the numberless substitutes for the older and better aerating agent, and prominent among them are the concoctions known as 'baking powders.' Bad enough when consisting solely of innocuous salts, they become abominable when composed of salts possessed of properties distinctly toxic, as only too many of them are."

It is one thing to point out an evil and a totally different thing to sensationalize it. We object to the erroneous and exaggerated dictum of our contemporary. *Industries* assumes far too much in stating that "Baking powders are bad enough when consisting solely of innocuous salts." There exists ample evidence to prove that baking powders composed of the alum now used by many unscrupulous manufacturers is injurious; but there also exists abundant evidence to prove that baking powder composed of pure ingredients is possessed of no objectionable properties whatever, and that yeast is a no better or healthier substance. The emphatic condemnation which alum in baking powder has received in the leading medical journals and by scientists everywhere is further justified by the following experiments made by the president of the Society of Public Analysts, Mr. Otto Hehner. Mr. Otto Hehner, records in the *Analyst*, November 1892, the results of several experiments upon himself, and three of his assistants. He says:—"I weighed out four quantities of alumed baking powder, amounting to two grammes. This is very nearly the quantity which would be contained in four ounces of bread, if made according to the directions on the label (the exact amount would be 1.88 grammes) mixed them with water, waiting until the effervescence had finished, added some sugar to render the dose palatable, and took one dose myself, giving the other three to my assistants. I requested them to let me know next morning their symptoms, without previous communication with each other. We were all in perfect health before taking the dose. About an hour and a half afterwards" says Mr. Hehner, "unpleasant symptoms began to appear." Mr. Hehner himself experienced first a feeling of great weight in the region of the stomach; later on, pains in the epigastoric region, slight difficulty in breathing, headache, and ultimately slight diarrhoea, —symptoms resembling an attack of indigestion. His assistants were similarly affected, and felt discomfort for several days. After complete recovery, says Mr. Hehner, "I took in a similar manner one gramme of the powder, or a quantity which would be contained in as little as two ounces of bread. Similar symptoms almost in an equal degree manifested themselves."

Conclusive as these experiments would seem to be as to the effect of alumed baking powder in retarding digestion, and the injury to the health of persons using the dishonest compounds, they are rendered more convincing still by further experiments made by Mr. Hehner and published in the *Analyst*. These experiments were made with egg albumen, with wheat flour, with bread, and with milk. Of those with egg albumen the President of the Society of Public Analysts says: "Speaking generally, the results show that the same quantities of alum either taken pure, as in the form of baking powder, prevent to an equal extent the digestion of hard-boiled white of egg." Experiments were made with pepsin capable of digesting 2,500 times its weight of hard-boiled egg in about three to four hours. When the alumed baking powder, however, was added in the same proportion as recommended by the manufacturer, a considerable proportion of the albumen was left undigested, varying from 14 per cent. of the amount taken to 28 per cent. Experiments made with raw flour gave results thus summarised by Mr. Hehner:—"In the case of digestion of flour alumed baking powder has far less influence than the corresponding amount of alum contained in it. Alum itself has a most injurious influence upon the digestion of flour, while that of alumed baking powder is slight." Four experiments were made of the effect of alumed baking powder on the digestion of bread. The results show that the influence of alumed baking powder upon the digestion of bread is more marked than it is in the case of raw flour. With small amounts (i.e. the amount of baking powder recommended by the manufacturer) the influence of alum and of alumed baking powder is equal.

The conclusions of the President of the Society of Public Analysts are:—That alumed baking powder exerts a most injurious influence upon digestion, whether artificial or within the body; that the presence of alum in baking powder must be regarded as an adulteration *injurious* to health; that samples containing alum should be condemned as injurious even though magistrates and recorders declare alum to be quite harmless.

Dr. Sykes said that he thought the strong evidence as to the deleterious action of alumina on the human economy which had been brought before the Society of Public Analysts by their President could not fail to convince any unbiassed mind that its presence in baking powder was highly undesirable. Mr. Cassal, F.I.C., Public Analyst for St. George's, Hanover-square, said the experiments disposed of the only argument Messrs. Blyth and Sutton had, viz., that carbonate of soda having precipitated hydrate of alumina, alum could no longer be present as such, and, therefore, that there could be no injury to the health of the consumer. It must be plain to the Society, Mr. Cassal said, that if the magistrates had properly appreciated the weight of the evidence before them (in the Ilkeston case) they ought to have given their decision in favour of the County Council (i.e. have convicted). It was plain enough that they had definite scientific experiments on the one side, and mere assertions of little or no scientific value on the other.

The very conclusive experiments, physiological and chemical, which we have here given, supported as they are by the severe condemnation by the *Lancet*, of the practice, as dangerous as it is dishonest, of using alum in baking powder, will enable such of our readers as have not hitherto devoted much consideration to the question to thoroughly understand the effect of the pernicious practice. In the *Grocer*, October 8th, one of that body, writing from Oxford, says:—

ALUM IN BAKING POWDER.

SIR,—I am old-fashioned enough to believe that there are many men yet left in the grocery business who will appreciate your remarks at the end of your comments on the *Lancet* article.

There is a notion, no doubt, amongst a certain class of traders that all they have to do is to let their customers have just what they ask for, without comment; but there are others who cannot reconcile it with their conscience to supply what they believe to be an injurious preparation.

In spite of any legal casuistry which may declare "that baking powder is not a food," although it is sold for the purpose of mixing with a food, honest tradesmen will decline to silence their consciences with such sophistry, and will sell only such baking powders as are guaranteed by makers whose names are in themselves guarantees for the purity of their manufactures.

I am, &c.

ONE OF THE OLD SCHOOL.

Oxford, October 3rd.

It was not of course to be expected that the makers of the substances thus condemned would not make some show of a defence, and the *Grocer*, October 29th, contained a letter from a Bristol firm, as follows:—

ALUM IN BAKING POWDER.

SIR,—"One of the Crowd" is quite wrong when he says the use of alum in baking powders has been proved up to the hilt to be injurious. The celebrated chemist, Mr. C. V. Petreus, writing in the *Pharmaceutical Record* of one preparation of alum, says, "It is the most perfect acid element that can be used in baking-powders. It sets free the gas from the soda bi-carbonate slowly, and hence does better and more effective work; the dry residue is only about half that of cream of tartar; and finally, unlike other 'acids,' it is almost entirely decomposed during its action with the soda bi-carbonate."

This latter is a most important fact; for is it not better to have next to no remainder than a deposit of tartar, such as one gets from cream of tartar and tartaric acid? Those substances which disintegrate slowly into gas (which "rises" the dough) and leave but a few grains of residue, are the substances *par excellence* with which to make baking powders.

The true secret is to discover the exact proportions of this particular preparation and soda bi-carbonate, so that both shall be totally evolved into a "rising gas" and leave no residue. Again, a teaspoonful of such baking powder is sufficient for two pounds of flour. If no indigestible residue is left (or at the most but a few grains of "inert material"—these are the very words of Mr. Petreus), and as few eaters would consume more than a few ounces of flour manufactured into bread, where do the injurious effects appear?

We trust our retail friends' "consciences" will now be at rest.

We are, &c.,

LEONARD & Co.

Rupert-street, Bristol,
October 22nd.

Apart altogether from the fact that such a person as the "celebrated chemist" Petreus is entirely unknown to scientists outside whatever the district may be that he inhabits, the statements made by the *Pharmaceutical Record* are proved by the experiments of Dr. H. A. Mott, and Mr. Otto Hehner, to be utterly false and worthless. The before-mentioned "One of the Crowd," thus deals with them in the *Grocer*:—

ALUM IN BAKING POWDER.

SIR,—On the strength of a statement made by "a celebrated chemist" in an American trade journal, your correspondents, "Leonard & Co.," take exception to my opinion that the presence of alum in baking powder was proved to be injurious.

Now, sir, thanks to cheap education, I must plead guilty to a little knowledge of chemistry, but my knowledge of chemists must be somewhat faulty, as it does not include "the celebrated" Mr. Petrus. Certainly, I do know that whilst one celebrated chemist will certify to a fluid being pure milk, another one, equally celebrated, will write it down milk and water. One will pronounce a certain powder coffee and chicory, another will say pure coffee.

Your correspondents lay considerable stress upon the chemist's statement that "the alum is almost entirely decomposed during its action with the soda bicarbonate." This is misleading, especially to readers who may not have a very exact conception of the meaning of the word "decomposed," as applied by chemists. A baking-powder, the components of which would not "almost entirely decompose," would be rubbish, whatever it was made of; the very act of liberating gas from the bicarbonate of soda necessitates decomposition of the acid as well as of the bicarbonate.

The difference is this—tartaric acid and soda decompose in such a way as to leave in the finished bread tartrate of soda, which, I do not hesitate to say, is more beneficial than harmful to the human system. The result of decomposition of alum and soda leaves in the bread sulphate of soda (against which I have nothing to say) and alumina—a substance which is the most useful thing known to the arts for converting soluble compounds into insoluble ones; just the reverse operation we wish to go on in the stomach.

Alumina, *per se*, may be harmless enough, but when it exerts its property of converting useful and digestible food-stuffs into indigestible compounds, which are still capable of decomposition (rotting) in the stomach and intestines, then it is that it is harmful.

I am, etc.,
ONE OF THE CROWD.

AMERICAN FRAUDS IN BAKING POWDER.

The *Evening News*, Detroit, calls attention to some tricks of adulterated baking powder makers in Detroit city, and says:—

"Some of the baking powder companies are operating a cunning trick upon the housekeepers of this city, in sending women canvassers around to houses, trying to impose upon the unwary what is called the foaming test.

"A chemical analysis has recently been made of the baking powders in whose interest the fraud is being worked, and it is found that a drug has been introduced which makes a froth like the syrup in soda water.

"Pure cream of tartar and soda never produces a froth like this; but the trick is well calculated to deceive those who do not know the action of a pure baking powder in producing leavening gas. If any lady is sufficiently interested in the matter to prove the fraud, let her buy at the drug stores two ounces of pure cream of tartar and one ounce of soda, mix them thoroughly, then put a portion in a glass and add water—this will reveal the action of pure baking powder. Any powder that froths or foams differently from what the pure materials do is sure to contain some form of adulteration.

"A baking powder manufactured in Chicago, and the one most actively used in humbugging the housekeepers lately, is known to contain albumen introduced for the special purpose of deceiving the eye in these tests. This adulterant has no leavening power whatever; it is a filthy substance, procured from the slaughter-houses in Chicago, and is nothing more or less than decomposed blood. It is used simply because it makes a great show of froth—to deceive the housekeeper.

"Persons to whom this so-called test is shown will do well to be careful before using any such powder, to ascertain the extent of its adulteration.

"Pure cream of tartar never froths in water; its action is to liberate leavening gas in the dough. It is a scientific fact that alum powder and those composed of blood albumen are the worst forms of adulterated baking powder. But this can always be distinguished by the froth they give off, instead of that natural effervescence which takes place with a cream tartar baking powder."

There are one or two American baking powders now selling in Scotland and the North of England, to which attention might well be directed.

PUBLIC HEALTH NOTES.

The experience of previous epidemics, says Dr. W. Collingridge in his report on the sanitary condition of the Port of London, can only lead one to expect a serious recrudescence of cholera on the Continent during the coming spring and summer, and, therefore, a corresponding danger of importation. The medical inspection of all vessels entering the Thames from infected or suspected ports must be kept up at all costs, inasmuch as upon this we shall have to depend mainly for safety. At present a medical officer of the Port Sanitary Authority is constantly on duty on the Customs Hulk at Gravesend, and goes off with the quarantine officer of the Customs to every vessel arriving from foreign ports.

A memorial of residents in the neighbourhood of the Corn Exchange was read to the Grimsby Sanitary Committee recently, objecting to the proposed alterations near that building, as being calculated to cause a great nuisance. The matter was discussed at considerable length, and, ultimately, the decision of the Council to carry out the alterations according to the plans was carried by one vote. The Sanitary Inspector (W. Moody), at the same meeting, stated that, in January last, he reported a case of alleged bad meat, when it was decided not to prosecute Mr. Appleyard, butcher, who was concerned. Since then Mr. Appleyard had been writing to the press attacking him (the inspector), and asking to be prosecuted. The Chairman read one of the letters referred to. Mr. Chapman moved, and Mr. Mundahl seconded, that all previous resolutions in the matter should be rescinded, and legal proceedings taken against Mr. Appleyard. This was carried unanimously.

The Sutton Bridge Port Medical Officer in his report to the Port Sanitary Authority congratulates them on the health of the Port throughout the year, not a case of illness having been admitted into the Port Hospital, and no case of cholera made its appearance. Two beds have been added to the wards of the hospital, in order to be better prepared to meet any epidemic, more especially the cholera that promises to invade the various ports during 1893. It is very important, he adds that an Inspector of Nuisances to the Port be appointed, and that he be a resident of Sutton Bridge.

ANOTHER POINT FOR THE BOARD OF INLAND REVENUE.

In our last issue we commented on the snuff frauds perpetrated upon the revenue. If what a correspondent of the *Civilian* writes is true, that is not the only kind of fraud that is going on. He says:—

"Every experienced officer knows that testing spirits for obscuration is a very delicate operation, requiring the greatest care and vigilance during distillation, as the least neglect during the process might mean a serious loss of revenue. A few years ago this duty was very efficiently performed, each examining officer attending to and distilling his own samples, and the surveyor's check, being a really practical one. He selected the samples for check, went through the whole operation himself, and then compared his result with that found by the examining officer. Some time ago, however, the economy craze set in, so outdoor officers and even extra men were sent on duty to the testing offices, thereby reducing the staff of examining officers by at least an equal number. These outdoor officers and extra men now put the retorts on the stills, wholly supervise them during distillation, and return the distillate to the examining officers, who are wholly employed in measuring and trying the strength of the samples going on, and in making up and likewise trying the strengths of the distillate. This system, no doubt, is admirable so far as economy is concerned, and the Board might say such duties for an extra man or outdoor officer are 'simple in their nature and easily performed,' besides, these officers don't certify to anything. But have the Board considered for a moment the loss of revenue that may occur yearly from such a system. Take, as an instance, a sample representing 6,000 gallons for duty on which there is a loss during distillation owing to want of vigilance on the part of the extra man or outdoor officer (these officers are not paid well enough to be over-careful) of say only 0.5 per cent., which the examining officer cannot detect in trying the distillate, and there is a loss of duty on 30 gallons, which at proof would amount to £16 5s. It is quite possible to lose many times this amount in an hour. According to the present check, the surveyor, it is evident, if he selected this sample could find nothing wrong, for he merely tries the strengths of the spirit itself and the distillate.

"Now, sir, I think that you will agree with me that these duties rather belong to the grade of 1st class examining officers than to an extra man at 3s. per day, or an outdoor officer at £55 per annum, and that in justice to all officers concerned, but especially to the examining officers and surveyors, who have to certify to results about which they cannot be certain, as well as to the British merchant for whose benefit testing for obscuration is supposed to have been principally introduced, this dual system of responsibility should be at once and for ever abolished. This can easily be done by introducing the old practice which the 'penny wise and pound foolish' economy system has for the time being superseded; and now that there are supernumerary surveyors, a few of the most practical could be appointed to visit the testing offices in order to have a real and not an approximate check carried out. In conclusion, I trust the Board may be pleased to abolish 'acting' in all its forms, and, for the reputation of the Service at large, maintain a staff of examining officers sufficient to have all their duties well and efficiently performed."

MORE TINNED MEAT POISONING.—Four members of a family residing at Wetherby have been poisoned by eating tinned salmon. Dr. Gibson was called in, and administered restoratives. Two of those poisoned have recovered, but the other two are still confined to bed.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerve like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT - COFFEE COMPANY.

(Proprietors, KRICKORIAN BROS.)

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Calvert's No. 5 Carbolic,

which is of the quality adopted as "Standard" by the British and German Governments after bacteriological tests. Unscrupulous statements that other Disinfectants are superior to genuine Carbolic Acid should be treated with the distrust they deserve. Sold by most Chemists in 8 and 16 oz. bottles, at 1s. and 1s. 6d. each; $\frac{1}{4}$, $\frac{1}{2}$, and 1 gallon tins, 2s. 6d., 4s., and 6s. 6d. each; or larger lots at rates on application to

F. C. CALVERT & CO., MANCHESTER.

60 MEDALS, &C.

The Chemists', Druggists' and Allied Trades EXHIBITION,

TO BE HELD AT

THE ROYAL AGRICULTURAL HALL, LONDON,

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Manufacturing Chemistry. Chemical Industries. Pharmaceutical Preparations. Surgical Instruments. Hospital and Ambulance Practice.

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(For further particulars see handbills).

Exhibition Offices: 2, NEWCASTLE STREET, STRAND, LONDON, W.C.
JOHN BLACK, Secretary.

BIRD'S Baking Powder,
BIRD'S concentrated Egg Powder,
BIRD'S Custard Powder,
BIRD'S Blancmange Powder,

are all guaranteed absolutely pure and wholesome, and free from any injurious ingredient whatever.

THE SKIMMED CONDENSED MILK FRAUD.

Commenting on the failure of Mr. Baggallay, the West Ham stipendiary magistrate, to appreciate the gravity of the skimmed condensed milk fraud, the *Pall Mall Gazette* says:—

Mr. Baggallay had the privilege of enriching the world with a leading case on condensed milk. A grocer was charged with selling that romantic condiment "with a portion of its cream abstracted, so as to injuriously affect its nature, substance, and quality, without making disclosure of such alteration." The "portion" thus modestly referred to proved to be the handsome one of 85 per cent. The defence was threefold: (1) water has as much nature, substance, and quality as cream; (2) condensed milk is not milk (which, indeed, seems only too fatally true); (3) the alteration was revealed by label. The first two points were dismissed as worthless, and as regards the first, it certainly stands to reason that if 100 per cent. of cream is worth 4d. a tin, 15 per cent. is not, but rather 3-5d. But the grocer saved himself on count three. His label bears the inscription: "Goat Brand. This tin contains skimmed milk, with nothing added but the finest sugar." To the vulgar intelligence there would seem to be more kid than goat about it; but no doubt Mr. Baggallay was right.

Food, Drugs and Drink,

—THE—

PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, APRIL 8, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE "WARRANTY" QUESTION.

THE grocers' trade papers are busier than ever in their subsidised work of hocussing the retail grocers and lauding Dr. Cameron's abortive Bill. The cases regularly reported in this journal illustrate the objects desired by these wretched advocates of fraud. In one case here reported, it will be seen that the "warranty" received the unmeasured condemnation of Mr. Newton for precisely the same reasons that it ought to receive the condemnation of every retail grocer in England, viz., that it enables the cut-throat swindling trader to disgrace an honourable trade and rob the public. To take the question of butter as an example. It might at least be expected that upon a matter so important as this, grocers could well look to their self-constituted advocates for light and guidance, but unfortunately for the retailers' interests the exact opposite is the case, and the resolutions of a gang of butter-merchants, who have brought the Irish butter trade to the verge of ruin by encouraging knavery, are placed before the retail grocers as absolutely fair and essential. What are those resolutions? That 20 per cent. of water should be fixed by Dr. Cameron's Bill; and this in face of the fact, well known to every one of the butter merchants, that any higher percentage of water in butter than 12 per cent. is unnecessary, and any greater amount than 15 per cent. is equally well known to those who passed the resolution to be absolute robbery. Who is it intended shall suffer by this swindling? *The principal victim is to be the retail grocer*, and after him the consumer. The retail grocer will suffer by the fact that he will lose, as heretofore, three to five shillings per cwt. by water running out of the designedly dishonestly-made butter, which water will be paid for by him at the rate of 1s. or more per pound. Let the retail grocer consider the meaning of this leakage. It is a loss to the retail grocer of from 3 per cent. to 5 per cent., and often more, on the amount of his butter turnover. The consumer may, in the case of quick sales, suffer another 2 to 5 per cent. of loss, but what does the manufacturer lose? Nothing whatever. He knows perfectly well that he stands to win if Dr. Cameron's Bill be carried in any form. It is the artful Bill he wants, and the warranty, whether the limit of water in butter be fixed or not is really a matter of small moment to him, as the warranty clause will do all he wants. Under its fraud-encouraging shield he could put 30 per cent. of water, or for the matter of that any amount he pleases into his butter, and mix as much margarine as he chooses. The retailer is no analyst and cannot detect the adulteration, and he may be selling the dishonest article in good faith. His chances of prosecution are fifty times greater than those of the swindling co-operative societies, that have for years past hocussed the public of large sums by carrying on the water-in-butter swindle and have never yet been punished, although the sale is done to the direct injury of

the retail grocer, whose conscience is not corrupted to the extent of allowing him to swindle hard-working mill-hands and labourers by such disgraceful methods of securing the "divi." In the first case—that of the retailer unaware of the fraud—it is a curious circumstance that he alone is visited for punishment, and that the colossal stores and great swindling advertising cut-throat traders go on with their frauds with impunity. Of what avail is it to the retailer that a warranty may, perhaps, shield him from a 10s. fine? He has all the disgrace and loss of trade, whilst the wholesale manufacturer, whose dupe he has been and for whose knavery he suffers, sits secure in Hamburg, Cork, Sweden, France, or may be as far away as Australia. We observe that the number of local authorities that see in this Bill the desire to make *Free Fraud* universal, and therefore oppose it, is steadily increasing. We must say we regret that their condemnations are not receiving greater support from the grocers themselves. But the expressions of approval from some grocers' associations are easily explained. Where the movement is not engineered by hirelings of adulterating manufacturers' journalists who disgrace their calling, and by trade papers run in the interests of butter mixture, margarine, skimmed infant-murdering swindles, and the like, the retail grocers, as a body, have so long been accustomed to the persistent misleading teaching of these wretched journals, and have not seen the gang who dictate the policy of the papers, that against their own best interests they are deluded into supporting proposals that would drive from the trade its best and most self-respecting members.

DR. CAMERON'S BILL.

AN ANALYST'S DAMAGING CRITICISM.

Dr. F. L. Teed, public analyst for Islington, has written to the Vestry of that parish a report on Dr. Cameron's Bill for Amending the Sale of Food and Drugs Act, which, we are glad to note, has been blocked by Mr. Heywood Johnstone, the new member for the Horsham Division of Sussex, in the interests of the agriculturists. Dr. Teed's opinions coincide so completely with our own that we reproduce them here:—

This is a short Bill, consisting of seven sections and a schedule, and I propose to consider the sections *seriatim*, and as briefly as possible.

Section 1 reads as follows:—

"1. The provisions of the Sale of Food and Drugs Act, 1875, and of any Act amending the same, shall apply to and include every wholesale trader or manufacturer of any article of food or drug who shall sell to the prejudice of the purchaser any article of food or drug which is not of the nature, substance and quality of the article demanded by such purchaser; and the seventh section of the said Act shall be read as if the words 'whether by wholesale or' were inserted between the words 'on sale' and the words 'by retail' in the said section."

This section is a well-meant, but badly devised attempt to catch the dishonest wholesale man, but on looking into the matter it will be seen that it will be a perfectly dead letter.

Purchasers of food or drugs for analysis under the Acts are of two kinds, private purchasers and the official inspectors.

Supposing a purchaser of the former class enters a place where food is on sale by wholesale. If the purchaser demands a small quantity, say a pound of some article, he will be refused on the ground that only wholesale quantities are sold, and there is no penalty in any Act for the refusal to sell to a private purchaser. The private purchaser might order a wholesale quantity, but this procedure is scarcely likely as he would have to divide it into three parts, one of which would be presented to the vendor, the second to the analyst, and the third would have to remain in the purchaser's possession intact until the case (supposing the article to be adulterated) had been decided. This would be rather a heavy tax on the public spirit of private purchasers.

This section makes it an offence for a wholesale trader to refuse to sell to an official inspector. The mere fact, however, of an inspector demanding a small quantity of an article at a wholesale place of sale would naturally put the trader on his guard, and I venture to think that no wholesale man, however largely he adulterated his goods, would ever be caught by this means.

Further, Section 17 of the principal Act, which it is proposed to make apply to the wholesale trader, states that the goods so applied for must be "exposed to sale or on sale." I am not

intimately acquainted with the practices of wholesale houses, but have always understood that in nearly all cases wholesale transactions were conducted, either by a traveller on the premises of the customer or in some sort of office, which might not be in connection with and perhaps not within a mile of the warehouse where the goods were stored, or the factory where they were made. It is obvious that if an inspector were to walk into the City office of some large provincial dealer in food or drugs whose warehouse for example might be at Newcastle, that at the City office no goods would be "exposed to sale or on sale;" at the Newcastle warehouse no sales would take place, so that there also no goods would be "exposed to sale or on sale." I am inclined to think that this Section (1) is entirely a dead letter, and that whether passed or not in its present form will make no difference to either the wholesale or retail trade or to the public.

The great innovation proposed is in Section 2 of the Bill, which reads:—

"2. Twenty-fifth section of the said Act shall be, and is hereby amended by the deletion of the word 'written' before the words 'warranty to that effect,' and every wholesale trader or manufacturer of any article of food or drug, or other person who in the course of trade shall sell to any person any article of food or drug, with intent that the same may be re-sold by retail in the state in which it is purchased from him, shall, unless he has in writing informed the purchaser to the contrary, be deemed, for the purposes of the said Act, to have given a warranty to the person purchasing from him that such article of food or drug is of the nature, substance, and quality demanded by such purchaser."

It was probably not the intention of the drafters of this Bill to make the Food and Drugs Act an absolutely dead letter, but this section, in its present form, would do so. Imagine the case of a retail trader charged with an offence under the Act; he has only to plead that he sold the article in the same state in which he bought it, and that he did not have written notice to the effect that it was not of the nature, substance, and quality demanded. This would be a perfect defence.

The wholesale trader is also made absolutely safe. The only plan at present for reaching the wholesale trader is under Section 27 of the principal Act (1875), for giving "a false warranty in writing." As a false warranty in print, or the total absence of warrant, is a perfect protection to the retailer in the Bill, it is extremely unlikely that any wholesale dealer would go out of his way and give a written warranty merely for the sake of being prosecuted. Neither this Bill nor the original Act places any penalty on the wholesale trader for a printed or implied false warranty.

The more Section 2 is examined the more hopeless it looks. Take the words "with intent that the same may be re-sold by retail in the state in which it is purchased from him." The only intent a manufacturer or wholesale trader has is to sell his goods; it is no concern of his what the purchaser does with them. This section, if ever allowed to become law, must certainly be cast into much better language; and there must be a further enactment that in Section 27 of the Food and Drugs Act the words "in writing" be deleted in the clause "Every person who shall give a false warranty in writing . . ."

The warranty section as it now stands is almost a dead letter, because few wholesale dealers care to place their reputations in the hands of a possibly unscrupulous retailer. There is nothing but the fear of detection to prevent a retailer from applying a warranty given with a genuine article to an adulterated article obtained from another source. The wholesale man would have immense difficulty in proving that the goods sold by him at some anterior date were really genuine, as he would probably have sold out the lot before the retailer was prosecuted. I would point out for the benefit of retailers who have been convicted of selling articles contrary to the provisions of the Sale of Food and Drugs Act, that even when they have no written warranty they may, under Section 28, recover all costs and penalties from the wholesale dealer if they are able to prove that they sold the article in the same state in which they bought it.

Section 3 of the Bill reads:—

"3. In any proceedings under the principal Act having reference to the sale of 'Margarine,' as defined by the Margarine Act, 1887, it shall be a good defence to prove that the sale was made in conformity with the regulations of the said Margarine Act, 1887, and in case of proceedings in Scotland under the said Margarine Act, the thirty-third section of the Food and Drugs Act, 1875, shall be held to be added to the sections twelve to twenty-eight inclusive incorporated in section twelve of that Act."

This placing of Margarine entirely within the Margarine Act, prevents any prosecution for the presence of poisonous ingredients in Margarine, under Section 3 of the Sale of Food and Drugs Act. While on this section I may point out that the deletion of the word "written" ordered in Section 2 of the Bill does not apply to the Margarine Act. Accordingly under Section 7 of the Margarine Act a "written warranty or invoice" would still be necessary to exonerate the vendor or even the possessor of Margarine contrary to the provisions of the Act.

Section 4 of the Bill reads:—

"4. In determining whether an offence has been committed under section 6 of the principal Act, by selling to the prejudice of the purchaser, coffee not adulterated otherwise than by the admixture of chicory, it shall be a good defence to prove that the seller delivered with or on such mixture a notice by a label distinctly and legibly written or printed, in the form given in the Schedule to this Act, stating the proportions of coffee and chicory contained in such a mixture."

This section does not appear to be either very useful or very harmful; it introduces into the Food and Drugs legislation the new principle of stating the per-centages of ingredients, an innovation good in itself, but had when restricted to one article only.

Section 5 of the Bill reads:—

"5. Whereas it is desirable to interpret the law as to the proportion of water in butter which shall be deemed as constituting an offence in proceedings under the principal Act, be it enacted that the sale of butter containing more than per centum by weight of water sold as butter shall be deemed to constitute a sale to the prejudice of the purchaser, unless such excess of water is intimated by the seller at the time of sale, and the onus of proving such intimation shall lie with the said seller."

It is of course desirable that some limit should be fixed to the amount of water in butter, the Margarine Act, 1887, having given a very loose definition of butter. The utility of this section, however, depends entirely on the per-centage of water fixed, and this the authors of the Bill have left blank.

Sections 6 and 7 of the Bill are merely formal, and the schedule gives the form of label for coffee and chicory mixtures.

To sum up:—The Bill, if passed as it at present stands, will render the Sale of Food and Drugs Act absolutely a dead letter. If put into clearer language, so as to convey the probable meaning of the promoters (though it is rather rash to guess at their probable meaning), it will render the conviction of a retailer impossible, and will place the wholesale dealer at the mercy of the retailer on the one hand and of the manufacturer on the other. It also legalises the addition of poisonous ingredients to margarine.

PUBLIC HEALTH NOTES.

A correspondent of the *Standard* calls attention to the stench arising from the sewer ventilators at the west end of Cheapside and east end of St. Paul's-churchyard. Places so offensive as these, he thinks, ought not to be found in the centre of the City of London; but the evil smells of the City are not confined to St. Paul's-churchyard. Old Broad-street, especially in the early morning, is like a cesspool. What the cause of it is we do not know.

At a meeting of the South Hornsey School Board last week, the medical officer of the union reported that a dreadful state of affairs existed in that district. There was no method of isolation, and children were sleeping in the same beds as others suffering from scarlet fever, while some of them were still going to school and to work. It affected the board because it affected the schools. The clerk was instructed to make inquiries with a view to the board taking action at their next meeting.

We reported a few weeks ago that a quantity of diseased meat, intended for the use of soldiers at Fulwood Barracks, Preston, had been seized and destroyed. Nothing has, however, been done to punish the dishonest purveyors of the stuff, and the laxity of the military authorities and the police is causing a good deal of local feeling. Preston has unenviable reputation on the slink meat question, and no wonder the inhabitants are getting ashamed of it.

SANITARY CONDITION OF PERTSHIRE.

Mr. George Mackay, Chief Sanitary Inspector for Perthshire, has just issued his report for 1892 to the County Council and the Board of Supervision on the sanitary condition of the county. In speaking of the water supply of the county he states that it is upon the whole pretty ample, and the quality in most cases good, in others fairly good, but in a number of cases it is bad or very bad. Reference is made to the defective supply in that portion of Carse of Gowrie, lying between the parishes of St. Madoes and Kinfauns on the west, and the parish of Inchture on the east. In this locality 19 samples were obtained, with the result that 18 of them were certified by the public analyst as absolutely unfit for drinking or domestic purposes, while the 19th was considered "fair." The subject of this defective supply was remitted to a Special Committee. After full consideration it was recommended to the District Committee to authorise the inspector to institute legal proceedings, under the Public Health Act, against the owners whose tenants are without a proper supply of water, with the view of compelling such owners to provide such supply, and to do all such works as may be necessary for that purpose. He has again to refer to the want of a proper supply of water for a number of the inhabitants resident on the banks of the River

Tay along Strathtay, in the Highland District. These people obtain their supply direct from the river, which is at times very turbid, and receives the crude sewage from the burgh of Aberfeldy and private houses. There are also a few houses on the banks of the River Forth, in the western district, which are imperfectly supplied with water, and pending the adoption of a scheme for giving a suitable supply of water, the inspector recommends the use of properly constructed sand filters placed in accessible positions, failing which it would be necessary to introduce small private filters into some of the houses. In connection with the water supply of the county, it is stated that during the year 68 samples of water were analysed. Of this number 33 were found to be good, 7 fair, and 28 bad. In regard to drainage Mr. Mackay points out that the county has at present only four districts which are drained under the provisions of section 76 of the Public Health Act, these being Pitlochry, Scone, Muthill, and Blackford. In Dunkeld the drainage of certain houses has been made right at the instance of Mr. Forbes, the district Sanitary Inspector; but it appears that while an evil was done away with in such houses, a fresh evil appeared in other premises in this respect, that, as in some cases the tributary or branch connections in this town are stone-built, which, when replaced by spigot and faucet fire-clay pipes and properly trapped, the gases are imprisoned, and thus impinge on and find a ready escape through the remaining stone-built sewers, and then through a porous section of the soil into the sunk cellars. In Pitlochry, on the other hand, there are no stone-built sewers, but there is an entire absence of any system of ventilating the sewers. There are no ventilating manholes on any of them, while the gullies are all trapped, thus absolutely locking up the gas which is very liable to find its way into the dwelling-houses and other premises whose drainage is defective. Mr. Mackay observes that the drainage of several villages in the county will never be put on anything like a satisfactory basis without the adoption of the provisions of section 76 of the Public Health Act. The village of Scone has taken advantage of the provisions of the Act in respect of drainage; but while the public or main drains are formed, very few of the houses are connected with them. Some of the inhabitants express a strong desire to form connections with these drains; but the inspector is afraid were this universally carried out by such a large population in the absence of a gravitation supply of water, which would command a proper flush or scour, it might lead to a more or less chokeage of the system. A number of diphtheritic sore throats were observed in the village during the months of December and January last, and several deaths occurred from diphtheria. Certain gullies in Scone have been kept in a very filthy condition. Mr. Mackay suggests that some change should be effected in obtaining a proper water supply, and efficient systems of draining and scavenging. Were these alterations effected there is no reason why Scone should not be described as a very desirable place of residence. The question of removal of domestic refuse is again treated at considerable length, and a number of defects are pointed out and remedies suggested. In the Perth district it does not appear that, except in Errol and Stanley, there is in any of the villages a proper system of removing domestic refuse. It is stated that through the liberality of Colonel Sandeman, Stanley is cleaned two or three times a week. Treating of infectious diseases, it is mentioned that fewer cases have occurred than last year, but allusion is made to smallpox having broken out at Balquhider and Crianlarich. The infection was brought to the former place by a tramp from Newcastle. As the district is wide and sparsely populated the inspector does not think it desirable that a large permanent hospital should be erected, and he considers that two or three portable hospitals should be provided for the reception of patients suffering from infectious diseases. It is stated that slaughter-houses have been a source of considerable trouble in respect of their defective construction, ventilation, and general sanitary condition.

WHAT TO DO WITH SKIM MILK.

Mr. J. Carter Bell was recently lecturing before the Manchester Chemical Society on the utilisation of skim milk. The attempt to reduce it to a solid substance in imitation of ivory is, it appears, not successful. It could, however, be converted into a portable article of food, by a simple process by which the farmers could get rid of the waste at a small cost, and leave a residue rich in nitrogenous matter. Some specimens which Mr. Bell produced were, he said, made from skim-milk and whey, the article produced being a food for man, cattle, and poultry. The manufacture of these products ought to possess great interest for the British farmer, for it would enable him to turn to marketable value what had too often been a waste product. This manufacture of dry curds and serin could be carried on at small places as well as large, but it would be more economical to work 1,000 gallons than it would be to work 100. It had been estimated that the manufacture of the dry curds would not cost more than about one farthing a gallon for the skim-milk used. The serin was manufactured by evaporating skim-milk and whey together in different proportions for different purposes. A special evaporating vessel was required, which would hold about 250 gallons, and this cost in Sweden (where the process was worked) £55. A machine for the stirring up of the mass as it was cooling down would cost, £10, for the size corresponding to the 250 gallons.

TRADE JOURNALS AND THE ANALYSTS.

In the interests of the Butter Mixture, Skimmed Milk, Lardine and other manufacturers who give them advertisements, the grocers' trade journals have begun the work of discrediting the analysts. It is a necessary move in the game of crushing English dairy farming, and handing to the Dutchman, the Dane, and other foreigners what ought to be a great home industry.

To successfully carry out the game, the retail grocers have dinned into them that the public analysts are their enemies, and the Food and Drugs Inspectors inveterate persecutors, ever on the pounce. In this endeavour one of these discreditable journals, in its issue of April 1st, published the following from a correspondent:—

"THE WORK OF THE ANALYSTS.

"At Bromley, Mr. Adams, the county analyst, certified that four milk dealers of the neighbourhood had sold adulterated milk, and, as these samples were to be referred to Somerset House, he at the first hearing got Mr. Otto Hehner and Mr. Allen to come down and give evidence. The first-named ran down the qualifications of the Government analysts, and the second affirmed that an old milk could not be examined, and that a certificate based upon an analysis of decomposed milk was not worth the paper on which it was written.

"The district analyst of course confirmed this view, and all three did their best to make the magistrates believe that milk could only be examined in the fresh state, and thus cut off the defendants' right of reference to Somerset House. Bounce carried the day to a large extent; the analysts were jubilant, and the milk dealers nowhere.

"A fortnight afterwards the cases not settled at the previous hearing were proceeded with, and Mr. Ricketts, the solicitor for the defendants, had in the meantime subpoenaed Messrs. Bell, Bannister, and Lewin from the Inland Revenue Laboratory, who had examined the samples, and Mr. Lloyd, an independent analyst, who had examined one sample, was also present.

"Mr. Adams and Mr. Hehner were there as before, but not Mr. Allen. The cases of John Wylde, of Anerley, and John Jones, of Penge, were proceeded with, but in the presence of Mr. Lloyd and the reference analysts, who had been attacked in their absence at the previous hearing by Messrs. Adams, Hehner, and Allen, the two first who were present durst not be examined. The result was that Mr. Adams's method of analysis was condemned, the cases dismissed, and in the case of John Wylde five guineas cost awarded.

"But this was not all. The magistrates said a great injustice had been done to two defendants who had been convicted at the last court and as they could not order the cases to be reheard, they suggested that a representation be made to the local board that the fines inflicted on J. E. Butcher and F. Ousley be not enforced.

"This was done, and, thanks to the tact and skill of Mr. Ricketts, the characters of four innocent men were cleared. The three analysts named have been presidents of the Society of Public Analysts, and I leave the public to judge whether the milk or any other trade should be subjected to such unfair treatment.

"The local journal very properly put it that 'to establish their innocence the defendants have been put to great expense, and their businesses have run the risk of being ruined. It is necessary that such a state of affairs should be rigorously dealt with, and that the dairymen, as well as the public, should have some guarantee of protection against the whims of analysts.'

"I am, &c.,
"FAIR PLAY."

GLASGOW AND DISEASED MEAT.—Our contemporary *The Evening Citizen* has a queer idea of what is an exemplary fine. It says in its issue of March 31st:—

"Repeated warnings, in the way of exemplary fines, do not restrain out-ride persons from risking the despatch of diseased carcases to Glasgow. At the Central Police-court, to-day, a Forfar man was fined £5 for sending to the city the carcase of a cow that had been suffering from tuberculosis."

The case is reported as follows:—

Andrew Carnegie, Black Den, Aberlemno, by Forfar, was convicted at the Central Police Court to-day, for sending diseased meat to Glasgow for sale for human consumption. Inspector Warnock said the animal had been suffering from tuberculosis, and that attempts had been made to cut the disease out of the carcase. The court imposed a fine of £5.

For this class of off-nice magistrates in England are beginning to inflict fines of £20. As our contemporary considers £5 exemplary it would, we suppose, regard £20 as prodigious! and yet the only way to deter the traffic is to inflict adequate penalties or imprisonment. To stop it altogether more inspectors, and an abolition of private slaughter houses along with the infliction of real fines, are what is wanted, but with £5 penalties the traffic in diseased meat is a paying one, considering the chances the unscrupulous butcher has of evading detection.

CIRCULAR NOTES.

MOST RIDICULOUS FINES.

Two cases that came before the Maidstone Bench on March 14th are instructive as showing the encouragement magistrates give to adulteration. In one the sanitary inspector saw the defendant immediately he received the certificate, and told him the milk had 56 parts of the cream abstracted. The defendant said the milk had not been watered, and that he could not account for the abstraction, unless it were because one of the cows had been giving milk for eleven months. The inspector then offered to take a sample of that cow's milk and to submit it to the public analyst, which offer was accepted; but the milk, on being analysed, showed that the original sample must have had 56 parts of the cream abstracted. The magistrates in this case inflicted a fine of 10s. and 10s. costs. Case No. 2 was milk to which 13 parts of water had been added, and the case had been once adjourned upon a technical objection raised by the defendant's solicitor. On being again heard on the 23rd of March, the magistrates decided against the objection, and fined the defendant 10s. and 11s. costs. It is absurd to suppose that local authorities will enforce the Acts against adulteration in the face of totally inadequate fines such as these, which do not cover the expense to which the authorities are put, and could be recouped in a day or two by the parties on whom the fines are inflicted. It is really an encouragement to fraud, and it is a pity that magistrates do not realise this.

WORKING UP THE SWINDLE.

We warned grocers that a determined attempt would be made to hocus them in Dr. Cameron's Bill. The following, from the *Cork Herald*, March 21st, justifies our warnings:—

In the circular addressed to the Irish members of Parliament, the South of Ireland Butter Merchants' Association again recapitulate the causes which led to the decline of the Irish trade, and seek the aid of our representatives in the effort to secure the removal of such causes, as far as the powers of Parliament go. Special attention is drawn to the Bill to Amend the Food and Drugs Acts, now before the House of Commons, and the members of the Association express their conviction that it is absolutely necessary to fix a legal standard of twenty per cent. as the proportion of water in butter. It need not be said that the Irish members will give careful attention to the representations of the important and influential body who have signed the memorial which we publish to-day.

This memorial is actually signed by persons who have absolute knowledge that no well-made butter should have more than 12 to 15 per cent., at the outside, of water in it, and that 20 per cent. would mean a loss of 3 to 5 per cent. waste water flooding his counters to the retail grocer. Yet all the time the grocers' representative journals are silent on the question.

MILK ADULTERATION IN THE STATES.

We learn from Burlington, Iowa, that the State Dairy Commissioner, Mr. Tupper, has been in that city for a week examining the quality of milk sold by Burlington dairymen. In a card to the public he states that a majority of the dealers have been selling milk below the standard of purity demanded by the law, and that he has discovered a combine by which the men had agreed not to sell milk above a certain grade. A number of arrests and convictions have been made, and Mr. Tupper says he will prosecute every man infringing the law. This is energetic and praiseworthy of Mr. Tupper.

The *Philadelphia Record* says on this subject that—

"There are one million persons in Philadelphia who are desirous of such statutory regulation of the milk trade as shall secure the delivery of a pure article. There are perhaps four or five hundred persons who are either interested in the sale of impure or adulterated milk or desirous of keeping open the opportunity of adulteration by defeating proper sanitary restriction. The million people are inactive in the assertion of their right to better security in the purchase of a necessary article. The milk dealers, on the contrary, are active and belligerent. Their money is at stake. They make far more noise at Harrisburg than do the pleaders for the lives of suckling babes or failing consumptives.

"One would think that in the face of the facts the Legislature would take instant action to promote sanitary reform, to cut down the death rate, and to defeat fraud. But there is no certainty what the Legislature may do. When Solomon said there were four things too wonderful for him—"the way of an eagle in the air; the way of a serpent upon a rock; the way of a ship in the midst of the sea; and the way of a man with a maid"—the Pennsylvania Legislature had not yet been conceived of. Had Solomon known anything about the Pennsylvania Legislature he would have added it to his list of things too wonderful in their ways to come within the compass of his understanding."

THE "GLOBE'S" CHARMING INNOCENCE.

Our contemporary the *Globe*, has the following on that most appropriate of days for such a paragraph *April 1st* :—

"A good many curious minds have been puzzled to account for the fact that adulteration is just as common as ever, in spite of more stringent means of suppression. Perhaps a little revelation which came out in the Hanley Police-court the other day may account for this anomaly in some measure. A grocer being convicted of selling diluted acetic acid as "pure malt vinegar," the stipendiary imposed a fine of £5 and costs, at the same time expressing his determination to stamp out such villainous frauds. But, immediately after this sentence was pronounced, the prosecution stated that the wholesale manufacturers from whom the stuff was obtained had undertaken to pay the defendant's fine and expenses. As this was not denied, either in court or through the Press,—the name of the obliging manufacturer was mentioned—it may be assumed that the assertion rested on solid grounds. In that case, the defendant received, of course, no punishment whatever, while the manufacturer could well afford to pay such a trifle out of the huge profits he must be making. Does the same system of defeating justice exist elsewhere and in other trades? Perhaps; at all events it is highly desirable to obtain trustworthy information on that point. The Hanley stipendiary gave warning that, for the future, he would resort to imprisonment instead of monetary penalties, and no doubt other magistrates would do the same if convinced that fines are paid by manufacturers. It may be, of course, that the practice is only a sort of "local custom." But, until that is made quite clear, it would be well for inspectors under the Adulteration Acts to keep their ears very open."

The naive innocence of the writer will amuse our readers. Everyone who has anything to do with the Adulteration Acts knows that the manufacturer has been for years doing what the *Globe* has just now discovered he does, and inspectors do not need to keep their ears well open for they know and have known for years all about it. It is only the heaven born geniuses of the daily press who, on this, as on almost every other real question affecting the public welfare, know nothing and can write inane drivel about such practices being "local custom."

APPEALS AGAINST MARGARINE PROSECUTIONS.

At the Dublin City Sessions, on the 29th ult., the Recorder heard the appeal of Hanlon, appellant; Myers, respondent. This was an appeal from a conviction of the defendant by Mr. Swift, Divisional Police Magistrate, who imposed a fine of £5 for selling margarine which was not properly labelled in accordance with the provisions of the Act. Mr. Macinerney (instructed by Mr. J. M'Sheehy) appeared in support of the conviction on the part of the Corporation. Mr. E. A. Harvey (instructed by Mr. Hanmore) appeared for the appellant.

A preliminary objection was made by Mr. Macinerney, who contended that the appeal could not be heard, inasmuch as the recognisances of Mr. Hanlon had been certified by a Justice of the Peace for the County Roscommon, and not the magistrate who heard the case in the court below. Mr. Harvey argued that the recognisance was good, and also that the Recorder had power to amend the recognisance, so that the appeal could be entered. The Recorder decided to hear the appeal.

Mr. Harvey said there were allegations as to the credibility of the witnesses, and the reliability of the analyses that entitled the defendant not to be convicted, having regard to the fact that in similar cases in the court below, on the same day that Mr. Swift decided this, Mr. O'Donel refused to convict. Counsel relied on letters dated the 9th and 13th of January last, which were written by the two food inspectors, Messrs. Myers and Sheeran, to Sir Charles Cameron, detailing certain steps that they had taken in order to test the accuracy of the analyses of Sir Charles' assistants, of which the inspectors complained. They alleged that samples taken from certain houses when submitted, were never returned as margarine, and that when, after a lapse of two months, portions of these same samples were submitted as having been taken from other provision dealers, they were certified as margarine. Counsel contended that either the analyses were so unreliable that the appellant could not be convicted, or else the letters of the inspectors were untrue.

The Recorder said that if he were in the position of the inspectors he would not like to lay a trap of that description, but at the same time he did not condemn them for what they had done.

After some further discussion the appellant announced his intention of proceeding no further with the appeal, which was accordingly withdrawn.

In the case of Joseph Kenny, provision dealer, of Thomas-street, who was prosecuted in the police-court by Inspector Sheeran, and fined £3 for exposing margarine for sale without being properly labelled, the conviction was affirmed.

CORRESPONDENCE.

[We have received the following letter, which, as it is the only defence of Dr. Bell any of our readers have favoured us with, we publish. Our own opinions on the question our readers will know.—EDITORS.]

SOMERSET HOUSE ADULTERATION STANDARDS.

MILK.

To the Editors of FOOD, DRUGS, AND DRINK.

SIRS,—The publicity which is being given, especially in journals devoted to food products, to the action of the Society of Public Analysts condemnatory of Dr. Bell, induces me to beg the favour of a portion of your space to say a few words upon the subject. There is an amount of persecution of Dr. Bell in these attacks, which are made ostensibly in the public interest, that conveys the impression that, under the advice of their principal official, the Somerset House authorities are, by maintaining too low a standard, virtually shielding fraudulent tradesmen. I wish, as an outsider, to say a word or two in defence of the judicial caution of Dr. Bell. The object of the Acts of Parliament, under which the Somerset House standard alluded to is imposed, is to prevent and punish adulteration. That is all. The test determined by the official standard, therefore, must be one conclusive of adulteration. It follows from this that the lowest possible standard of natural milk, taking every condition and season into consideration, is the only safe judicial official standard, if the official standard is to be universal and unvarying in its application, and magistrates are to be guided by it in deciding to convict or acquit accused persons. It would be absurd indeed and monstrous to make the average quality, or a quality approaching the maximum, the official standard, however natural it might be for analysts to have regard to this, in their special determinations and opinions as to cases submitted to their judgment.

I hold, therefore, that Dr. Bell, of Somerset House, in making this very necessary discrimination, and acting with careful reference to information collected over the whole country as to the varying proportions of fat, etc., in natural milk, taking localities, other conditions, and seasons, into account, deserves the approbation and the sympathy of his profession and the public for his method and his principle. If the recommendation of the public analysts were to be enforced, 90 per cent. of the dairymen of the country would be quite innocently before the courts and convicted more or less frequently.

The lowest possible standard must be the standard test for adulteration, just as the highest possible, must be the standard for merit awards. I may again remark upon the necessity of every condition of milk production being taken into account. These will be found to include the situation of the farms, the breed, age, and condition of the cows, the season of the year, the rent of the farms, and the price of the milk; and also the question of premiums to farmers for special yield, or quality. On account of this wide area and diversity of conditions, there is and can be a wide variation in the quality of natural milk, just as much as there would be in the product of different vines. Although milk is not a manufactured article, yet, in the result of these conditions, such wide variety in quality will obtain, without any adulteration whatever. I have the evidence of a public analyst before me in reference to a case of prosecution in a district of Scotland—not of the best nor the worst as regards conditions. In this case, Mr. Tatlock, as reported in the *Food, Drugs, and Drink Journal* of date 11th March, 1893, declared that, whereas the Somerset House standard was 2.50 of fat (and the public analysts demand a higher) he would consider that at a rate as low as 1.92 of fat the milk would be natural and pure. It would appear, therefore, that Dr. Bell after all, has not gone very far, if at all out of his way in the direction of mercy, tempering justice.

I am, yours truly,

WILLIAM V. JACKSON.

Royal Exchange,
Manchester, 3rd April, 1893.

SOMERSET HOUSE GIVES ITSELF AWAY.

At the last meeting of the Derbyshire Dairy Farmers' Association, the fourteenth annual report was read, in which occurs the following instructive paragraph :—

The Government Analysts at Somerset House sent an official to confer with our committee as to fixing a standard for the purity of milk. Every member of the committee offered him facilities for taking samples on the farm premises. A selection was made of several dairies, the 18 samples taken were analysed by Dr. Bell, who certified that the solids varied from 13.55 to 11.45, with a mean average of 12.67. These results compare favourably with 11 per cent., which is now regarded as "pure." Information as to the varying qualities of different cows milk, the effect of food, and the seasons of the year, cannot fail to be useful, but it is not at all clear to your committee that any good purpose would be served by fixing one unvarying standard of purity.

ADULTERATION PROSECUTIONS.

MILK.

Several milk adulteration cases were heard at the Westminster Police-court on the 28th ult. Among the defendants was Mrs. Ely, of Pimlico, who was charged with selling milk minus 32 per cent. of original fat. Defendant protested that she sold the milk in the condition she got it from the wholesale dealer; but, by an error of comprehension, she handed in a "guarantee," stating that the consignor would not warrant it. "Oh," said Mrs. Ely, "that does not refer to the milk we sell in the shop; it has to do with a special line of milk used for afternoon tea." Fined 40s. and costs.

At the Tamworth Borough Police-court, on the 20th ult., Joseph Paxton, milk seller, Upper Gungate-street, pleaded guilty to selling skimmed milk containing 13 per cent. of added water, on January 27th. Mr. Morris said on the morning of the date named he took fifteen samples of milk from fifteen different milk sellers, and with the exception of that purchased from defendant, the other samples were genuine, a fact upon which he thought the town might be congratulated. William Grassam deposed to purchasing half-a-pint of skimmed milk from defendant's cart when in Church-street. Defendant said he only put a little water to rinse the pails with. He had no intention of robbing the public. The magistrate's clerk (Mr. E. Argyle), to the inspector: Do you say that skimmed milk should be only milk with the cream removed? The Inspector: Yes. The Clerk: How many times may you skim it? The Inspector: Until you get all the skim off. (Laughter.) Defendant was fined 5s. and costs.

At the Swansea Police-court on the 27th ult., William Parkhurst, milk vendor, of Mariner-street, was summoned for selling adulterated milk on the 27th of February. Mr. Glasbrook Richards defended. Sergeant Payne spoke to the purchase and produced the analysis, which showed that 20 per cent. of the milk was skimmed. The defence was that there was a written warranty labelled on each churn containing the milk, which came by rail, and consequently the defendant and his employers, the Swansea Pure Milk Company, were protected. The case was adjourned for the production of the contract.

Hannah Combear, of Fabian-street, was summoned for a similar offence. Defendant said this milk was obtained from the last defendant. According to the analysis, it contained 32 parts of skim milk. Defendant accounted for the discrepancy between the analyses in the two cases by saying while one sample was taken from the top of the churn, the other was drawn from the bottom by means of the tap. She sold it as she received it. A fine of 20s. was imposed.

At Lambeth Police-court on the 29th ult., Jane Thorn, Draper-street, Walworth, was summoned for selling milk containing 12 per cent. of added water. A dairyman was now called and said he had sold the milk to the defendant, just as he had received it from the wholesale dealer. The defendant admitted, however, that she had been fined before. Mr. De Rutzen said this class of case had gone before superior courts, but it came to the fact that poor people must be protected. If people asked for milk they were entitled to have it. If they wanted to add water they could do so themselves. He fined the defendant £5, and 12s. 6d. costs.

At the City Police-court, Hereford, on 28th ult., Edwin Matthews, dairyman, Hereford, was summoned under "The Sale of Food and Drugs Act, 1875," with having sold a certain article of food—to wit, milk, in an altered state, the said article of food having been altered by the abstraction therefrom of a part thereof, namely, 10 per cent. of its fat, so that the quality of such article of food was injuriously affected, without making disclosure of such alteration. Mr. T. G. Chance prosecuted, at the instance of the Hereford Urban Sanitary Authority, and Mr. Garrold defended. After the examination of witnesses for the prosecution, Mr. Garrold called witnesses for the defence. The Bench having consulted, the Chairman said that the magistrates were unanimously of opinion that the milk that was sold was the same that came from the cow, and the explanation that they had heard was quite satisfactory. At the same time they thought that the case was quite deserving of investigation, and that the public officer only did his duty in making the inquiry.

At the Pembroke Police-court, on the 28th ult., George Phelps, of Fleet, near Pembroke, was fined 20s. and 25s. costs for adulterating milk.

At the Leek Police-court, on the 29th ult., Moses Corbishley, farmer and milk seller, Leek, was charged with selling adulterated milk.—Mr. Fisher, of Stafford, appeared for the county authorities, and Mr. Bishton for the defence. The evidence showed that the milk contained 32 per cent. of added water, and the defendant, who had been previously convicted, was fined £7 and costs.

At Middlesbrough, on the 20th ult., Robert Greet, 13, Trent-street, was charged with selling adulterated milk. Mr. T. M. Barron defended. Mr. Anderson, inspector of nuisances, said he took a sample of the milk, which he submitted to Mr. Stead, the borough analyst, for analysis, who found that it contained 7½ per cent. of water. In answer to Mr. Barron, witness said previous samples had been found all right. For the defence, Mr. Barron said that the rather large percentage of water contained in the milk might easily be accounted for by the state of the cow. Fined £2 2s. including costs.

At the Bristol Police-court on the 29th ult., Henry Ash, of 16, Brandon-buildings, Clifton, was summoned for selling 1½ pints of milk, containing 30 per cent. of added water. Inspector Lee, the officer appointed under the Food and Drugs Act, stated that on the morning of the 4th, he saw the defendant delivering milk in Corn-street. He purchased 1½ pints from him, and informed him that he

was a police officer. He divided the milk into three parts, and gave one part to the defendant, retained one himself, and sent the third to the Bristol public analyst, whose report showed that it contained 30 per cent. of added water. Mr. Wansbrough, who defended, asked that the portion kept by Mr. Lee should be sent to Somerset House for analysis. The application was granted, and the case was accordingly adjourned.

At the Marlborough-street Police-court, on Thursday, March 30th, J. C. Cardinal, trading as the West Suffolk Dairy Company, 12, Great Russell-street, W.C., was summoned by T. F. Strutt, inspector, Strand District, for selling milk (in Gerrard-street, Soho) adulterated with 10 per cent. of added water, the defendant produced a warranty which he alleged he had received with the milk, but produced no witnesses to prove the warranty. Mr. Newton, who spoke in very strong terms, remarked that half the milkmen of London relied on so-called warranties and sold milk with impunity under its cover, but he asked, what about the warranty to the general public, the consumers ought to have. He considered it necessary to convict, and said Mr. Cardinal had his remedy against the person who gave the warranty. Fined 10s. and costs.

CONDENSED MILK.

At the West Ham Police-court, on the 29th ult., Rachel Birchell, a grocer, of Tate-road, Silvertown, was summoned, before Mr. Baggallay, for selling on February 17th a tin of condensed milk which on analysis was shown to have had a portion (85 per cent.) of its original cream abstracted, so as to injuriously affect its nature, substance and quality, without making disclosure of such alteration. Mr. P. Lynch appeared for Dr. Sanders, the medical officer of health of West Ham; Mr. Beck represented nominally Mrs. Birchall, but in reality the Condensed Milk Company of Ireland (Limited). On February 17th, Allan Bagshaw, an assistant in Dr. Sander's office, went to defendant's shop, and asked for a tin of condensed milk. The shopman asked what price he required, and mentioned three prices. Bagshaw selected a tin at fourpence. It was wrapped in brown paper, and another assistant named Croker coming in, the contents of the tin was divided into three parts, and one part was sent to Mr. Pooley, the public analyst. His certificate was that the sample had been prepared from milk which had had 85 per cent. of its original cream abstracted by skimming or some other process. Mr. Beck, for the defence, said the question was one of great importance, and apart from technical points, he had several points to raise. In the first place, he would urge that the article was not injuriously affected; secondly, that the section of the Act did not apply to condensed milk, as it was a manufactured article, and, thirdly, that the defendant had de facto disclosed the fact of the alteration of the milk. The disclosure might be by one of two means—either verbally or by way of a label on the article—and the latter was the best possible way to disclose the alteration. As to the abstraction of the cream, that was done in the process of manufacture; the cream was divided, and sugar was added to compensate for it, and also to preserve it. As to his third point, which he said he mostly relied on, Mr. Beck pointed out that the label around the tin bore these words:—"Goat Brand. This tin contains skimmed milk, with nothing added but the finest sugar. By the addition of a little water, to reduce it to required consistency, it may be used for almost every purpose to which ordinary skimmed milk is used." And after other recommendations at the bottom was "thereby proving its superiority over ordinary skimmed milk." Mr. Baggallay said there was nothing in the first two points, the only question being whether the vendor made a disclosure of the article. A purchaser must be considered as a person of ordinary intelligence, and if he did not look at the tin to see what he was buying he should take the consequences. He would hold that the label was a sufficient disclosure of the alteration, and would dismiss the summons.

BUTTER.

At the West Ham Police-court on the 29th ult., Henry G. Berry, of 10, Tate-road, Silvertown, was summoned for selling butter, which on analysis proved to be adulterated with 90 per cent. of margarine. He pleaded guilty, and was fined £3 and costs.

MARGARINE.

At the Tamworth County Petty Sessions, on the 23rd ult., James Titterton, shopkeeper, Lichfield-street, was summoned by Mr. J. E. Morris, county inspector under the Food and Drugs and Adulteration Acts, for displaying margarine for sale without a label attached and for selling half a pound of margarine without wrapping the same in paper labelled "margarine," on January 26th last. Mr. Freeland defended. Evidence of the purchase was given by Mr. Morris and William Grassam, his assistant. The defence was that the compound was purchased of Mr. Feeley, a wholesale merchant in Birmingham, and that "Irish lump butter" was the quality ordered, and for which 10d. per pound was charged. It was not discovered until the night before the inspector visited the shop that margarine had been sent instead of butter, and when the purchase was made the assistant was informed that it was margarine. The defendant was fined 5s. and costs on the first charge, and ordered to pay the costs in the second.

Edward Massey, huckster, Gungate-street, for a similar offence on the same date, was fined 1s. and costs.

MUSTARD.

At the West Ham Police-court on the 29th ult., Henry G. Berry, of 10, Tate-road, Silvertown, was summoned for selling mustard altered with wheaten flour and turmeric. He pleaded guilty, and was fined 5s. and costs.

LARD.

On the 28th ult., John Nixon, a provision dealer, of Whitepost-lane, Little Ilford, was summoned by Captain Kittoe, an inspector under the Food and Drugs Act, for selling a substance purporting to be lard, which proved on analysis to be adulterated with 30 per cent. of cotton seed oil. The Bench did not consider any deception had been attempted, and dismissed the case.

ANALYSTS DISAGREE.

At St. Austell, on the 28th ult., Emma Strutridge, grocer and general dealer, of Levrean, near St. Austell, was charged at the instance of the police, with having on February 20th sold lard adulterated with 20 per cent. of cotton seed oil. The case was defended by Mr. T. Bellringer (Bellringer and Conliffe, of Liverpool). Superintendent Newcombe stated that on February 20th, he purchased at the shop of the defendant nine ounces of lard. He informed the shopkeeper he intended having it analysed by the public analyst, and divided the lard into three parcels, which were properly sealed. One parcel was left with the shopkeeper, one was sent to the county analyst for Cornwall, Mr. Benedict Kitto, London, and the other he kept. On March 10th, a certificate was received from Mr. Kitto stating that the lard was adulterated with 20 per cent. of cotton seed oil, and as a consequence a prosecution was instituted. Dr. Bellringer said he nominally appeared for the small shopkeeper, Mrs. Strutridge, but really for the refiners of the lard, Messrs. Fowler Brothers, Limited, Chicago, New York, and Liverpool. Their lard was refined at Chicago and an element that might prove important in the case was the fact that the pigs were fed chiefly on maize, which was a very oily substance, and the fat of the pig, which was lard, consequently contained a higher iodine equivalent than ordinary English lard. The parcel left by the police with Mrs. Strutridge had been forwarded to his clients, and they had had that analysed by Dr. Campbell Brown, D.Sc., Professor of Chemistry at the University Colleges of Manchester and Liverpool, public analyst for the county of Lancaster, the city of Liverpool, and other adjoining boroughs, and Dr. Campbell Brown had certified that the lard was pure and absolutely free from cotton seed oil or any other foreign fats. He had examined it by five different tests, and all agreed in showing it genuine lard. The labels on the buckets were coloured and bore the words "James Wright and Company, Crown Brand. Registered. Chicago, U.S.A. Choice Pure Lard Produce of America. Guaranteed strictly pure lard, free from water, and all impurities." They could prove it was pure lard, but that was not the first time the breath of slander had been busy in regard to the lard sent out by the firm. Recently he was in a case in Northumberland where the analyst for the county had given a certificate similar to that forwarded by Mr. Kitto. But when his attention was called to the tests under which he had analysed the lard, he fairly and candidly, on applying another test, gave notice to the police that his previous analysis could not be relied upon, and the charge was withdrawn. After citing several cases of a like nature, Mr. Bellringer asked the justices to consider whether justice would not be met by dismissing the case. But if the Bench were against him in that suggestion he would ask that a parcel of the lard be forwarded to Somerset House.

Sir Charles Sawle said the Bench thought it would be more satisfactory to all parties if the attention of Mr. Kitto were, through the chief constable, drawn to the certificate of Mr. Brown, and the case was adjourned in order that that course might be adopted.

WHISKY.

At the Cumberland Petty Sessions on the 25th ult., John Philipson, manager of the Crown Tap-room, was summoned for selling adulterated whisky. Inspector Booth said that on the 15th February he purchased a pint of whisky at the Crown Tap, kept by the defendant and his wife. Witness told the defendant that he had bought the whisky for the purpose of analysis, and thereupon divided it into three parts. The analyst's report showed that the whisky was adulterated 35 per cent., 10 degrees more than the limit allowed by the Act. The defendant, who said his wife had put too much water in the whisky by mistake, and that he was not aware that it was so weak, was fined 10s. and costs, and warned to be more careful in future.

FOOD PROSECUTIONS.

BEEF.

At the Borough Police-court, Huddersfield, on the 28th ult., before F. Greenwood, D. Midgley, and J. A. Wrigley, Esqrs., Ezra Lightowler, butcher, Paddock; F. Sykes, butcher, Northgate; George Armitage, butcher, Heckmondwike; Sarah Dyson, Pa. dock; and Sykes Brook, farmer and milk dealer, Almondbury, were summoned for having in their possession diseased meat, which was not fit for human food. Mr. H. Barber, Town Clerk, appeared to prosecute, and stated that Mr. J. H. Sykes had been instructed for Lightowler and Mrs. Dyson, but was unable to appear to-day. Therefore, he (Mr. Barber) had agreed to an adjournment for a week.

The cases against the two defendants named, were adjourned for a week accordingly.

Mr. Welsh appeared for George Armitage, Mr. White was for the defendant Brook, and Sykes was unrepresented.

James Lightfoot, inspector of nuisances, said that on the 28th of February last he went to Bottom's Farm, at Almondbury, occupied by Sykes Brook, farmer, Almondbury, at twelve p.m. (midnight).

He knocked at the door, and Sykes Brook got up, and showed him the carcass of the cow. Inspector Drake accompanied him. They went into a wood shed adjoining the farm, and found four quarters of the meat hanging by a hook on the wall. Brook said to him (witness) that "he had sold the cow to Fred Sykes for 18s., and that if he had known that they were going to kill it on his premises he would not have sold it to him." Witness examined the meat—it was wet, soft, cracked on pressure, and void of fat. They went again early on the morning of March 1st, and arrived at the farm about a quarter-past eight. They remained on the farm until Fred Sykes and George Armitage came by a way underneath the place in which witness and his companion were. One of the men said to the other, "Thou lying devil; I knew d—d well there was some one here." Witness looked at the meat, and then went higher up. At a quarter-past one the same men who were there at 11.30 came again, and brought with them a carrier, named Holroyd, of Heckmondwike. The men then commenced to load the meat into the cart. Armitage carried the carcass, and Fred Sykes assisted him. Holroyd was in the cart taking the meat from them. When all had been placed in the cart excepting the last quarter, Armitage said to Sykes, "Tha's had one quarter i'th muck; I shan't be able to do much with it." They (witness and his companion) went to them when they (the defendants) had got the meat into the cart. He (witness) asked Armitage where they were about to take the meat to, and he replied, "To Adwalton." He informed Armitage that he was the inspector of nuisances to the Huddersfield Corporation, and that he would report the case. The meat was dressed in the ordinary way. They had the meat taken off the cart and put back into the shed, and it was afterwards brought to the sanitary office, examined by the magistrates and the medical officer, and ordered to be destroyed, which was accordingly done. Armitage informed witness that he had given 32s. 6d. for the cow to Sykes, and had paid 2s. 6d. to a butcher for dressing it. The flesh was somewhat sodden and soft, and the carcass emaciated. The meat was in that condition that when cut up into strips it would look fairly wholesome on a stall. He looked at the lungs, and found them very badly diseased from chronic inflammation of the lungs.

By Mr. White: The effect of that would be that the whole carcass would be more or less diseased. He did not see Sykes Brook there.

Arthur Dodson, butcher, said he had been summoned to give evidence. Sykes asked him if he would kill the cow in question if he sold it. Sykes told him it was at Almondbury. He said he would as long as he was playing. He saw Armitage at the Clothiers' Arms, and was present when he bought it from Sykes. He believed that 32s. 6d. was paid for it, on the 28th February. Armitage asked Sykes if it could walk, and he said "No." Then Armitage asked witness if he would dress it, and he said he would as long as he had nothing else to do. He told witness to dress it as well as he could. He slaughtered the cow the same afternoon at Bottoms Farm, in the shed before referred to, and he was helped by Fred Sykes and Sykes Brook. He dressed the carcass, and because the shed was not high enough they had to quarter it. They were not quartered in an ordinary way when the carcass went stiff. He got 2s. 6d. for slaughtering the animal.

Mr. White said the case was rather hard as regarded his client, who bought the cow in January for 30s., and knew that it was diseased. Wanting to get rid of it, he asked Sykes to sell it for him, and Sykes did sell it for 18s., which was paid to his client. Therefore he had parted with all interest in his cow. His client was at the Clothiers' Arms on the 28th February, and was present when the carcass was re-sold to Armitage, better known as Dabber for 32s., and he was asked if he would allow the cow to be slaughtered on his premises, and he foolishly consented. But he had no knowledge that it was going to be taken anywhere except to the knackers.

Fred Sykes, Almondbury, said he sold the cow to Armitage on the 28th February, for £1 12s. 6d., and it was intended for the knacker—Hepworth, at Adwalton. Armitage asked if it could walk, and witness said it could not. When the inspector came he was at Bottoms Farm, and Armitage and he told him that the cow was intended for the knackers. The cart in which the parts were to be taken away was a sort of a coal cart, and in a "mucky" condition. The meat was dirty, and cut up in any fashion; the sheets in which the meat was wrapped were not clean. By Mr. White: Brook asked him to sell the cow, and witness gave him 20s. for it, and afterwards he sold it for 32s. 6d. to Armitage. By the Court: He paid the 20s. to Brook after he got the 32s. 6d. from Armitage.

Wm. Holroyd, carrier, at Heckmondwike, said the cart was his. On the 28th February, Armitage ordered him to come to Almondbury for a knacker cow, and he told him to take it to John Hepworth, at Adwalton.

The Bench, after a short retirement, said they found the case proved, and they fined Armitage £10 and costs, Brook £5 and costs, and Sykes 10s. and costs. The defendants were allowed time in which to pay the money.

VEAL.

At the Guildhall Police-court, London, on the 28th ult., John Cann, described as a wheelwright and grocer, of Canworthy Water, Lawriston, Cornwall, was summoned at the instance of the Commissioners of Sewers for sending to the Central Meat Market four pieces of veal which were totally unfit for human food. Mr. Vickery, who prosecuted, said there were two summonses against the defendant for sending bad meat to the market. The first case showed that the defendant bought the calf for 5s., killed it, and sent it to Mr. Greatorex in the market. There was a note with the meat, which said, "If it is not good enough for Mr. Greatorex hand it over to Mr. Venables for cats and dogs." Several witnesses having been called, Dr. W. Sedgwick Saunders deposed that he had seen this meat. It was soddened and

in an emaciated state. The eating of it would be attended with great danger. Alderman Ritchie said that the accused had rendered himself liable to be imprisoned for six months. As he had not been there before, he should not sentence him to the full term. No fine, however, would meet the justice of such an offence, and he should send accused to prison for six weeks' with hard labour. Mr. Vickery said he did not propose to proceed with the second case.

PORK.

At the Bristol Police Court on 29th ult., Henry Packer, butcher, of 63, Newfoundland-road, was summoned for being in possession of meat unfit for human food, and intended for the food of man. Mr. Wise prosecuted on behalf of the Sanitary Authority, and Mr. H. Holman Gregory defended. Samuel Thomas, a sanitary inspector, stated that on the day in question he was at the Bristol Joint station, where he saw the defendant in company with another man. Four packages were taken into the defendant's trap, and he drove off in the direction of his shop in Newfoundland-road. Witness followed the trap, and saw the man take the four packages into the shop. He went in and found one package containing mutton which was all right. He asked defendant where the other packages were, and defendant said they only contained bones. Subsequently he was shown the packages, and he discovered that two of them contained the diseased carcase of a pig, which was dressed as if intended for human food. The defendant said that he was going to take the pig to a horse slaughterer named Stone, for whom he had bought the carcase. In cross-examination witness said the defendant was not a pork butcher. He sold beef and mutton. The Clerk (Mr. T. Holmes Gore)—Does he sell sausages? (Laughter.) Witness—I don't know. Defendant—I never cut a pig up in my life. Mr. Gregory, for the defence, said the fact that the defendant was not a pork butcher was strong evidence that he did not intend to dispose of the carcase for human food. His explanation was that he was buying other meat in the country, when he was offered this "knacker's meat," as it was called, and he bought it for Mr. Stone, as he had often done before. Mr. Whitwill said if the defendant had had honest intentions he would not have attempted to conceal the fact that he had the carcase on his premises. He would be fined £5, or in default a month's imprisonment.

TOMATOES.

At the Leicester Police-court on the 29th ult., before Mr. J. G. F. Richardson and other magistrates, Samuel Shipley, fruiterer, Erskine-street, and Alfred Herrick, were summoned for having exposed for sale in the Market-place, and intended for food, nine boxes of tomatoes which were unwholesome, on the 15th March. The Town Clerk prosecuted on behalf of the Corporation, and called Mr. Coles, sanitary inspector, who said he saw Shipley selling boxes of fruit by auction in the Market-place. He saw a box of tomatoes purchased for 1s., and on examining the fruit he saw that it was rotten. He stopped the sale, and examined a number of other boxes, nine of which he seized. Shipley said nothing to him when he interfered, except that he asked that the good fruit might be returned. Witness replied that there was no good fruit to return. The fruit seized was examined by the Medical Officer of Health and by two magistrates, who condemned it, and ordered it to be destroyed. The Chairman remarked that there seemed to be no disguising the fact that the fruit was positively rotten. It was the custom to pick over that kind of fruit for manufacturing purposes, for making tomato sauce, &c.

Dr. Priestley, the medical officer of health, said he had examined the boxes of fruit. Each tomato was carefully wrapped in tissue paper, and the whole embedded in sawdust in the same way as oranges were packed. He had each box opened, and examined them all, and, roughly speaking, he did not think there were a dozen sound tomatoes in the lot. The boxes were rotten throughout, and he could easily press his hand through the fruit to the bottom of the box. They were utterly unfit for food, but unscrupulous people might use them for mixing up with others for the purpose of making tomato sauce. He did not think the tomatoes were sound when they were shipped. Tomatoes might be all right when they were shipped, but might be rotten on reaching England. At the conclusion of the evidence, the Chairman said the magistrates considered the case was clearly proved in every detail. They must protect the public against adulteration of every kind, and it was always better to deal with it at its source rather than let it dribble through and then punish the person who vended. As practical men, defendants must have known that that fruit was not fit to be even sorted, and there was the great difficulty that anything of that description might be converted into a mess called sauce. Defendants knew the risk they were running, and the magistrates were bound to convict. Anyone buying the rubbishy defendants were dealing in needed protection. The case here was not on all fours with that of Liverpool, where the circumstances were different. However, they would not impose a heavy fine, though any cases that came before them in the future would be more severely dealt with. Defendants would be fined 20s., or 14 days' imprisonment.

REFUSING TO SELL SAMPLES.

At the Gloucester Police-court, on the 29th ult., Joseph William Edwardes, butter merchant, Lower Barton-street, was summoned for refusing to sell butter to the Medical Officer of Health for the city when requested to do so. The Town Clerk (Mr. G. Sheffield Blake-way) prosecuted, while the defendant, who was unable to appear through illness, was represented by Mr. A. C. Champney.

In opening the case the Town Clerk stated that he appeared to prosecute on behalf of the Sanitary Authority, and the proceedings were taken under the 11th Section of the Food and Drugs Act, 1875. As he understood that Mr. Champney did not dispute the general facts of the case, it would only be necessary for him to call as a witness the Medical Officer of Health. The only question in the case was whether the butter was actually exposed for sale, and he respectfully submitted that the article in question was exposed for sale.

Dr. Campbell, Medical Officer of Health, deposed that he was specially authorised to obtain samples of food, and take proceedings, if necessary, under Act of Parliament. On the 7th March he visited the defendant's shop in Lower Barton-street, about half-past seven o'clock in the evening, and asked to be served with some butter which he had seen in the window marked "Finest Devonshire, 1s. 3d. per lb." The shopman, after a moment's reflection, said that he would not sell any of it, and refused to do so. Witness then said, "Do you refuse to sell it? Here is your price, 1s. 3d.," but the shopman still refused to take the money and sell the article. Witness afterwards asked the man whether he was aware who he (Dr. Campbell) was, and that he required a sample of the butter for analytical purposes, to which the shopman replied "I know that."

Mr. Champney addressed the Bench on behalf of the defendant. He said that in such prosecutions as the one under notice it was material to consider precisely what was the article demanded. The section of the Act was for the protection of the public and to enable a sanitary inspector to go into a shop and call for articles exposed there for sale. The question was whether the butter referred to was exposed for sale or not. He submitted that it was not, and contended that it would be a harsh procedure to convict his client for declining to sell. He should be able to prove that it was a universal practice not to sell things out of the window in consequence of the inconvenience which would be caused by constantly having to redress it. To have supplied Dr. Campbell with what he asked for the shopman would have had to have removed a very considerable quantity of butter, inasmuch as that asked for was right down in the very front. But it was not on the ground of inconvenience that he asked their worship to dismiss the case, but for the reason that it was a general practice not to sell butter out of the window. His client's attention had not been previously called to the section of the Act, but henceforth they would be most delighted to go to any inconvenience to satisfy Dr. Campbell's requirements.

Samuel Frederick Gardner, the man in charge of the defendant's shop in Lower Barton-street on the day in question, said that the butter which Dr. Campbell asked for was at the bottom of the window. It could not be seen from inside the shop, and the Medical Officer of Health took him outside to point it out. It was quite correct that it was marked "Finest Devonshire." Witness told Dr. Campbell that he did not sell from the window, but informed him he had some of the same quality at the back of the shop, as he could not pull the window about. Thus, however, Dr. Campbell would not have. Witness was quite sure that he said to Dr. Campbell that he did not sell from the window after it had been dressed. In order to have got the butter in question it would have been necessary to have moved about six and a half casks of butter. "They did not sell to a customer out of the window, let alone Dr. Campbell." Witness was not previously aware of the section of the Act by which Dr. Campbell had a right to obtain the butter.

Cross-examined: They did not keep butter done up in pats longer than they could help. The window was dressed three times a week.

The Mayor: Why do you mark butter in the window for sale if it is not for sale?

Witness: We dress the window, and keep the same quality at the back.

In answer to Mr. Champney, witness stated that the butter with which they dressed the window was subsequently sold when the window was undressed.

Alfred Edwardes, who said that he had had considerable experience as a butter merchant—having been general manager for one of the largest firms in England—deposed that it was the practice of the trade to dress the windows three times a week, and not to undress them for anybody. This was because it took a whole day to dress a window fit for the public to see, and if they made a practice of pulling the window about when requested, a man would have to be kept to constantly re-dress it. He had been in the trade all his life, and never knew of the practice of fetching an article out of a window that had been dressed. Witness was looking after the defendant's shop in Barton-street during his illness, and he had now given instructions for the men to sell the inspector anything from the window. It was not his wish that Dr. Campbell should have been refused.

In giving the decision of the Bench, the Mayor said that the magistrates considered the case proved, and were satisfied that the butter was exposed for sale. Inasmuch, however, as Mr. Champney had promised that in future the Medical Officer of Health should be supplied from the window if he wished to be so supplied, the penalty would be reduced to £5 and costs—£5 10s. in all. The Bench considered that it would have been a very simple matter for the shopman to have got the butter out of the window with some kind of instrument.

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Commencing with our issue of April 22nd., the title of this Newspaper will be changed to

Food & Sanitation,

and several new features of the first importance to the public welfare will be introduced and dealt with by the ablest experts on food and sanitary subjects. We take this opportunity of thanking the Medical officers of Health, Public Analysts, Food and Drug Inspectors, Sanitary Inspectors, Weights and Measures Inspectors, grocers and members of local authorities who have written us commending our efforts, and we hope that the improvements we contemplate, will make the paper still more valuable to our subscribers and the public. We would be glad if Medical officers and others sending us reports would, where possible, send them in duplicate.

AN ALLEGED RAPID METHOD OF BUTTER ANALYSES.

M. Brullé, a French chemist, is stated to have discovered a new method of detecting margarine in butter, said to be so simple that fifty analyses can be got through by an analyst in a day:—

As M. Brullé is competing for a prize offered by the Society of French Agriculturists, his process is kept secret for the present, but will be divulged a few weeks hence. He has been subjected to the most careful tests, butter purposely adulterated in various proportions by representatives of the Society having been given to him to analyse, under the supervision of the director of the Society's Laboratory. He has worked out ninety analyses, and it is stated that he was not only able to distinguish the adulterated from the pure samples, but also in many cases to declare the approximate proportions of margarine introduced, speedy though his process is.

Food, Drugs and Drink, —THE—

PUBLIC ANALYTICAL JOURNAL AND SANITARY REVIEW.

SATURDAY, APRIL 15, 1893.

NOTICE..

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

ALUM IN BAKING POWDER.

WE invite the special attention of our readers, be they manufacturers, grocers, analysts, food and drug inspectors, or the general public, to the case of alum in baking powder, which we report in another column. The most objectionable thing we know in connection with adulteration is the fact that manufacturers of adulterated foods boast that they can get as many medical and chemical experts as they like to swear anything for big enough fees. The ethics of the medical and chemical professions, we would have thought, would scarce have permitted of some of the extraordinary acts we have from time to time witnessed in courts of law, and unless the noblest of all professions are to have their repute lessened, the censors in those professions will need to seriously consider the whole question of "puffing" testimonials, adulteration defending, and like practices, now largely indulged in to the injury of scientific truth and of public health. The very dread of running the risk of a case going to appeal deters scores of authorities from prosecuting for dangerous adulterations, and the unchecked existence of a ring of reputed masters in science ever ready to swear that milk without cream is equally as nutritious and valuable a food as milk containing cream—or even more glaring untruths than this—fosters fraud in food stuffs to an alarming extent. But to leave this question for that more immediately concerning us—alum in baking powder. We warned grocers some eight months ago against the sale of this article, unless it were free of alum. Our warnings were unheeded by many, and the adulterating manufacturers organs became the apologists for the adulteration. Grocers now see the result, and may perhaps be inclined to reflect upon it. In the case decided at Swansea, the real defendants were the proprietors of the Excelsior Baking Powder, whose counsel took excellent care that their names did not transpire. They used the grocer as a catspaw in their game of adulteration. He receives the opprobrium, has the loss of trade, of time, and the worries innumerable that have attended the case, and for what? Wholly and solely to protect the wholesale manufacturer, who first made a dupe of him, and then used him for his own purposes. We wonder why grocers continue to be so short-sighted, and allow themselves to be worked as pawns in the manufacturer's game. In the present case, Mr. James James is the victim, whilst the artful manufacturer loses not even repute. We hope to see grocers show more regard for their own protection. It is high time they ceased to allow themselves to be shuttlecocks in the adulteration game, and in cases where they are convicted for vending adulterated articles bought by them in good faith as pure, if grocers would bring actions for damages against the wholesale dealer or manufacturer, they would soon put the trade on a better footing. Already, the makers of the harmful alum baking powder are busy hocussing

grocers by promises to continue defending every case, and boasting that they will tire out local authorities. If the grocers are wise, they will refuse to be any longer dupes, or run the dangers of loss of repute, convictions, and the worry of prosecutions; and give a decided refusal to deal in the unhealthy adulterated article of alumed baking powder. There are plenty of pure baking powders manufactured free from alum, which grocers can sell without any risk.

REPORTS AND ANALYSES.

VAN HOUTEN'S PURE SOLUBLE COCOA.

Of this preparation of cocoa our Consulting Analyst says:—

"I have subjected samples of the cocoa of Messrs. C. J. Van Houten and Zoon to most searching analysis, the samples being purchased by myself at various retail establishments. I have also analysed many of the various cocoas at present in the market, and for convenience may class them in the following three divisions, taking the cocoa nib as a basis.

The *cocoa nib*, i.e., cocoa deprived of its shell containing all the fat natural to cocoa, amounting to about one-half its total weight, has gone out of use, owing to the great length of time for which it must be boiled to produce a smooth palatable beverage, and its fatty nature which is objectionable to many. In the second division may be classed the so-called *homeopathic cocoas*, consisting of cocoa bean and starch, with or without addition of sugar. These on being prepared with hot or boiling water become thick, nauseous starchy emulsions, poor in food value. In the third division are the pure cocoas to which no such additions of starch or sugar have been made, and of these I find Van Houten's in every way superior. In this cocoa, not only is the excess of fat removed, but the alkaline salts naturally contained in the cocoa bean are slightly increased. The result of this particular mode of manufacture is to soften and partially dissolve the tissues of the cocoa bean, rendering them more amenable to digestion, combining with the astringent principles present in cocoa, and preventing in a very great measure that settling in the cup so characteristic of cocoas from which part of the fat has been simply expressed. Van Houten's mode of manufacture is therefore in every way superior. It develops to the utmost extent the natural flavour and aroma of the cocoa bean, renders the beverage smooth and free from astringency, and greatly increases its solubility and digestibility.

Van Houten's cocoa is therefore pure and genuine in every sense of the word. Its great digestibility and strength, united with delicacy of flavour and aroma, are simply unequalled, while its composition, purity, excellence of quality, and scientific mode of treatment alike characterise it as a most valuable article of food."

Our Consulting Analyst's opinion of the quality and admirable manufacture of Van Houten's cocoa is corroborated by a large number of the principal analysts. From another report, the results of analysis, expressed in parts per 100, are as follows:—

Cocoa butter	33.90
Cocoa starch	12.90
Albuminoid substances	22.10
Organic substances, soluble in cold water, &c.	19.38
Ash	8.32
Moisture	3.40

100.00

Referring to Van Houten's special mode of manufacture, this eminent analyst says it "adds to the proportion of one of the most valuable of the natural inorganic constituents of the cocoa, while it increases the solubility and nutritive value of the preparation, and fully develops its natural aroma and flavour." H. add.—"This cocoa is a genuine soluble cocoa of the highest quality."

Our attention has been directed to a paragraph in our issue of 12th November last year, in which a quotation from Dr. Sydney Ringer's book on Therapeutics, referring to "Alkalies," was made, to apply to cocoa. We find that Dr. Ringer's remarks referred to the general use of alkalies, and not to the form in which alkaline salts are naturally present in the cocoa bean, and present in varying proportions in all manufactured pure cocoas. We have no hesitation, therefore, in saying that the application of Dr. Sydney Ringer's remarks to cocoa, especially to the cocoa which we have above considered, is not only unwarranted, but, to our personal knowledge is not entertained by Dr. Sydney Ringer himself.

PUBLIC HEALTH NOTES.

The "pleasant waters of the river Lee" are not as delectable as the old song made them out to be. It has been the lot of the medical officer of health of the Cork Corporation, Dr. D. D. Donovan, to disillusionise the natives, and this is how he did it to a meeting of the Public Health Committee of the Corporation:—

With reference to a report of mine, dated 28th February (which you referred to the Waterworks Committee) drawing attention to the fact that a foul stream was allowed to empty itself into the river immediately above the intake at the waterworks; also to the fact that half the water distributed to the city is unfiltered, I find by a report of the Waterworks Committee, "that an analysis of this water twelve months ago showed not a tinge of impurity." Now I respectfully submit that, notwithstanding this analysis, it is most objectionable to have this dirty stream continuously flowing into the river and discolouring it for several yards in extent, more especially with an open sluice below, through which it more than likely finds its way to the reservoirs without being filtered. In reply to a question from the chairman the Waterworks engineer is reported to have stated "that when the water was high all the water was filtered." Now by a curious coincidence I visited the Waterworks on two separate occasions, lately, and on each occasion the water in the river was exceptionally high. On the first visit I was accompanied by the principal medical officer of the Cork Garrison; on the second visit by the Local Government Board Inspector. At each visit I distinctly saw the water flowing through the sluice freely at the Waterworks side of the filtering bed; further I was given to understand that the sluice itself is so scientifically constructed that when it is shut down the water flows freely underneath it, and I am forced to the conclusion that but for this ingenious contrivance a sufficient supply of water would not be delivered to the city either filtered or unfiltered." On the proposition of Mr. Hogan, seconded by Mr. Casey, the report was referred to the Waterworks Committee.

A new system of sewerage is about to be carried out at Keynsham. At their last meeting the sanitary authority decided to adopt the scheme of Mr. C. N. Lailey, C.E., Westminster, to drain the Mangotsfield district by gravitation, at an estimated cost of £15,316. The total length of the proposed sewers would be about eighteen miles.

On the motion of the Chairman, Mr. J. Cooke Hurl, jun., it was decided to follow the example of the Mangotsfield Parochial Committee, and to approve of the plans and estimates prepared by Mr. Lailey. It was further decided to apply to the Local Government Board for a loan of £19,000 to carry out the necessary works as soon as the Parochial Committee had stated the amount that would be required for compensation. It was agreed that the amount to be asked for should be above the estimated cost, in order that contingent expenses might be allowed for.

The Stone (Staffordshire) Board of Guardians, at a meeting on the 21st ult. (Mr. R. Kenderdine presiding), decided to adopt the Notification of Infectious Diseases Act for the union, in deference to representations made to the Board both by the medical officer of health for the union and the County Council medical officer. Dr. Fernie (medical officer of health) reported the existence of defective drainage and a bad water supply at the village of Oulton, and a very insanitary condition of things in recently-built villa residences at Blythe Bridge. Typhoid fever had broken out on several occasions owing to the defective water supply and bad sewage arrangements, the majority of the houses draining into a stream running into the Blythe.

Rotherhithe seems to be in a bad way in regard to its sanitation. The Vestry have after much stirring up from outside taken on two temporary sanitary inspectors to assist the Medical Officer (Dr. Shaw), and one of these inspectors, Mr. Alfred Carter, reported at the meeting last week that he had visited 169 houses, and that sanitary defects existed in 167 of them. Mr. W. Wallis, the second inspector, reported that he had visited 285 houses, and nuisances existed in 200 of these. The chief defects were dampness, want of water in the w.c.s, ventilation, and sinking of the walls owing to the softness of the ground. Mr. Stuart moved that the necessary appliances to enable the inspectors to efficiently carry out their work should be supplied. This was agreed to. It is not too soon that this backward local authority has awakened to a sense of its duty to the public.

The necessity of making extraordinary provision to cope with a possible visitation of cholera this summer is bearing rather hardly upon the port sanitary authorities, who have practically to take precautions for the whole nation. The Tees sanitary authority are providing a new floating hospital, and at their last meeting Alderman Bulmer asked whether the charge would not be defrayed by the Government, no satisfactory reply could be given of course. It is probable that it will come to the point that the Government will undertake all extraordinary precautions themselves in the future, and defray the cost of necessary works.

MORE DISEASED MEAT CASES IN HUDDERSFIELD.

At Huddersfield, on the 5th inst., Ezra Lightowler, butcher, Paddock, was summoned on three separate charges—first, for having, on March 4th, diseased meat in his possession which was intended for the food of man; secondly, with selling meat which was diseased and unfit for the food of man on the 2nd of March; and thirdly, with slaughtering for a sale a cow in a place which was not provided nor licensed by the Corporation. Sarah Dyson, 189, Church-street, Paddock, was also summoned for having diseased meat in her possession which was intended for the food of man, on the 3rd of March. Mr. Barber, Town Clerk, prosecuted; and Mr. J. H. Sykes appeared for the defendants.

Mr. Sykes said he was not going to contend that the animal was not diseased.

The Town Clerk said the fore quarters were found on the premises of George Gronbach, pork butcher, The Shore, Huddersfield; and the hind quarters were found at Mrs. Dyson's, at Paddock. All showed, especially the lungs, that the animal was seriously affected with tuberculosis. The fore quarters were sold to Gronbach by the defendant Lightowler on the 2nd of March.

The Chairman: And admitted to be diseased.

Mr. Sykes: I admitted that the cow which was killed by the defendant Lightowler was diseased; I know nothing about the fore-quarters sold to Gronbach.

James Lightfoot, sanitary inspector, said that on the 3rd of March he visited the defendant's premises, and the defendant said to witness, "I know what you are after, it is not here, I only killed it for its fat and hide." The defendant further explained that he had sold the hind quarters for poultry food, and the other had been sent to Stainland to be boiled for pigs. He found a bone on the premises that was diseased. The defendant then said, "Those are the bones, but you will not find the meat here." He then went to premises occupied by Mrs. Dyson, of Paddock, and found the two hind quarters of a cow, which had suffered from the same disease. They were taken to the sanitary office. He then discovered the meat of the two fore quarters of a cow, and examined it, and found it suffering from tuberculosis, and, like the other, he had it taken to the sanitary office, and it was examined by a magistrate and the medical officer, and condemned. He also found some portions of diseased meat on the premises of a pork butcher named Gronbach, alleged to have come from the defendant's premises.

Mr. Sykes: Had any arrangement been made with Gronbach that if he would give evidence for the prosecution he should not be proceeded against?

Witness: No.

Witness (in reply to Mr. Sykes) further said that at Gronbach's some of the meat was in pickle, and the other was being prepared for potted meat.

Dr. Kaye, medical officer, said he visited the defendant's premises, and he corroborated the evidence of the sanitary inspector. The first portions of the carcase were some rib bones he found in an outhouse, and, on examining them, he discovered they were well marked with the tuberculosis disease. They were eventually condemned.

In reply to the magistrates' clerk,

Witness said that he had to find the bones himself, and had no assistance in this matter from the defendant.

In reply to Mr. Sykes,

Dr. Kaye said portions of the hind quarters found at Mrs. Dyson's were very nicely dressed, and looked well at first, but when examined the meat was found to have indications of the disease. He would not say that the bones in the outhouse were dressed or prepared for sale; they might be. He was present when Mr. Crosland's son explained that the pieces of meat were his property. Mr. Crosland bought them on the 28th February. He had ascertained that the portions of the meat alleged to have been sent to Stainland had not gone there.

George Gronbach, pork butcher, Shore, said that several times he had bought meat from Lightowler and other butchers. He had never before that day seen the defendant; but had always dealt with his men. He remembered the inspector coming to his place on the 4th March, and seizing some pieces of beef, and taking it away. The meat in question was brought in a cart by a man named North, from whom he had bought it. He did not know whose cart it was that brought the meat; he had never noticed any name on it.

Mr. Sykes remarked that the prosecution must prove the agency of the man from whom Gronbach bought the meat, before they could offer any evidence of the transactions of the agent, and after some conversation

The Deputy-Magistrate's Clerk said that before they could criminate the defendant they must prove direct agency.

After other questions put to witness by the Town Clerk,

The Chairman at this point warned the witness that in answering the questions put to him he should be very careful what he said. He was not bound to answer such questions as the Court considered might incriminate him.

The Town Clerk said he did not think he had yet put any such questions.

The Witness, looking at a piece of paper handed to him by the Town Clerk, said that was the bill he got from the man North.

Mr. Sykes objected to the document being put in unless the bill was connected with Lightowler.

The Deputy-Magistrates' Clerk held that the agency must be proved.

The Town Clerk said that the bill bore Lightowler's name, and he could prove that the man North was in the employ of Lightowler.

James Lightfoot, re-called, said he had seen a man named North, who lived in Fenton-square, Manchester-road, working in the defendant's shop; but he did not know whether North worked exclusively for Lightowler. There was not much work for that class of men until the slaughtering day.

Cross-examined, he could not say that North did not work for other butchers.

Mr. Barber said that was the case.

Mr. Sykes submitted that no agency between North and Lightowler was proved. The fact was that Gronbach bought the meat of North, and Gronbach was the man who was using the meat for the food of man, and the man who ought to have been prosecuted.

The Chairman said this was the first case the Bench had had under the Amending Act of 1876, and of course they had given it their best consideration, and they had come to the conclusion that the charge was not proved, and therefore dismissed it.

The Town Clerk said he would withdraw the other charge against Lightowler, and the case against Mrs. Dyson.

Mr. Sykes asked that the case against Mrs. Dyson should be dismissed, which he was entitled to ask.

The magistrates assented, and dismissed the charge against Mrs. Dyson, and allowed the charge of slaughtering in an unlicensed place brought against Lightowler to be withdrawn.

The above case shows how legal chicanery serves to screen from punishment persons who, either by design or by ignorance, prepare diseased meat for the use of their fellow-creatures. We pointed out some time ago how Mr. Shiel, at Westminster, refused even to condemn meat that was green, putrid, and diseased because it had *not been exposed for sale*. Gronbach, who in the present case had some of the diseased meat in pickle, and more of it being prepared for potted meat, in his evidence admitted having bought the defendant's meat, never from the defendant personally, but from his men, and but for the vigilance of Dr. Kaye and his inspector, Mr. Lightfoot, there is no doubt the meat would have been sold for human food. We cannot but think that in the light even of the evidence alone, Messrs. Greenwood, Lowenthal, Midgley, Tomlinson, and Wrigley, the magistrates, by their decision, permitted a grave miscarriage of justice, but this strange disregard by magistrates of that most important of all questions—the public health—is only one instance of what we find existing everywhere throughout the country. It is a pity that so few magistrates appear to appreciate the gravity of cases of diseased meat, or adulterated food.

PROFESSOR VAUGHN ON CHEESE POISONING.

Board's Dairyman has a very interesting article on American cheese, in which it says:—

Quite frequently we read of a case of poisoning through the eating of cheese, ice-cream, oysters, canned meats and fish. All albuminous animal matter is subject to the formation of a class of poisons called ptomaines, which are formed by the action of certain bacteria on animal tissue. Butter being almost wholly pure carbon is devoid of this danger. Cooking, while it will kill the bacteria, does not seem to kill the poison. The class of ptomaines which form in milk, cheese, and ice-cream is called Tyrotoxin, and was discovered and defined by Prof. Vaughn, of the Michigan University. The investigations of Prof. Vaughn into the causes which led to the formation of this poison are exceedingly interesting, and would furnish very profitable reading and study for every farmer who is producing milk. Prof. Vaughn shows that this poison is introduced almost invariably through the carelessness and filthy habits of those who handle the milk. He found tyrotoxin in milk which was produced by setting in open pans in a room where the floor was soaked with putrid water and s'op. Tyrotoxin in cheese may be produced by the filthy habits of the patrons in not thoroughly cleansing the cans or allowing the milk to set over night in a filthy place, or in doing a variety of other filthy things connected with the handling of milk. It may also be caused by a filthy cheese-maker, who refuses to keep his factory and all utensils thoroughly sweet and clean. There is good reason to believe that what cheese makers call taint in milk and the resultant floating curd in cheese is closely allied at least, with the formation of tyrotoxin.

The reputation and business of a number of cheese factories in the United States have been ruined by serious cases of poisoning caused by the eating of cheese made at those factories.

Neither farmers nor cheese-makers seem to realize half the time the great importance of thorough cleanliness and vigilance in the handling of milk for cheese-making. It is ten times as important in cheese-making as in butter-making, and every one should know that it is important enough there. Thank fortune we are on the road to a better state of affairs through the institution of dairy schools in various states, and the training of educated cheese-makers. We hope to see the day when every cheese factory, in Wisconsin at least, shall be managed by a cheese-maker who is intelligent enough to make a study of milk and all that it implies. When that time comes a number of cheese-makers, who never read or study concerning their business, will seek some other employment, to the great benefit of their patrons and the rest of mankind.

DR. CAMERON'S BILL.

Mr. D. A. Thomas, M.P., Mr. Pritchard Morgan, M.P., Mr. Alfred Thomas, M.P., have, we learn, promised to support Dr. Cameron's Free Fraud Bill, which he misnames: An amendment to the Food and Drugs Acts. They have also promised to do all they could to defeat the sale of foreign and Colonial meat bills. What are the local authorities and the agricultural associations in these gentlemen's constituencies about that they do not put the true facts of Dr. Cameron's wretched bill before their members of Parliament?

BELFAST GROCERS AND DR. CAMERON'S BILL.

The Belfast and North of Ireland Grocers' Association appear to be neither as impetuous nor as short sighted as some of the Associations, possibly perhaps because the Association aims at really working in the interests of grocers themselves, instead of being dupes of designing adulterating manufacturers. At the last meeting the secretary said:—

"That the clause respecting coffee would prove most vexatious, for it was stipulated that the precise quantity of coffee and chicory used would have to be shown on the papers in which the articles were wrapped.

"Several members thought a good deal of lost time and extra expense would result from the adoption of this clause, and Mr. Conway suggested that if it did become law it would perhaps be desirable to sell the two articles separately; then purchasers could mix them as they thought fit.

"It was suggested that Dr. Cameron, the introducer of the Bill, should be written to on the matter but after further discussion it was decided that copies of the Bills before mentioned should be purchased with a view to the members becoming more intimate with their contents before any definite action was taken. A full discussion will therefore take place at the next meeting."

We were the first to point out the dangerous fraud-fostering nature of Dr. Cameron's bill, and its coffee proposals, in particular, received our condemnation as being as stupid as they were unworkable.

ISLINGTON VESTRY AND DR. CAMERON'S BILL.

At their meeting on the 7th inst., the Islington Vestry discussed the report of Dr. Teed, public analyst of Islington, on Dr. Cameron's Food and Drugs Act Amendment Bill (which report we published last week). The Public Health Committee reported that it was of opinion that the Bill, while affording additional facilities to the retailer to avoid conviction, wholly fails to secure the conviction of the wholesale dealer; and recommending that the Vestry petition against the Bill, and in favour of the appointment of a Parliamentary Committee to consider the working of the Sale of Food and Drugs Acts, and that the attention of the metropolitan authorities, and the principal provincial corporations be drawn to the Bill.

Mr. Cufflin, in moving its adoption, contended that if the Bill was passed, they would be powerless to proceed against the shopkeepers, and an action against the wholesale vendor would be a very difficult proceeding.

Mr. J. Williams moved, as an amendment, "That this Vestry, having considered the report of the Public Health Committee on Dr. Cameron's Sale of Food Amendment Bill, hereby resolves to petition Parliament in favour of the second reading of the Bill, on the understanding that the said Bill shall, on the second reading, be referred to a Select Committee of the House of Commons." He thoroughly endorsed the remarks of Mr. Cufflin that the present Bill required amendment, and it was for that purpose that Dr. Cameron had brought in that Bill. The action of the Public Health Committee in giving the matter their consideration proved that they were thoroughly alive to their work. There was no doubt a great many adulterated articles were sold in London, and in that parish, but Islington shopkeepers did not transgress in that direction in nearly so great an extent as retailers in other districts. Most traders dealt in an honourable way, but there were black sheep in every trade. He urged them not to petition against the Bill, for the consequence might be that it would be shelved for years to come. It was promoted in the interests of the small shopkeepers, who were not in a position to demand a written warranty from the wholesale vendor. The little wholesale man was the person who sold adulterated articles, and poor shopkeepers were tools in their hands. They wanted to annihilate the small wholesale traders, for the big firms would not risk their reputations by venturing to adulteration.

Mr. Berry seconded the amendment, which he considered most reasonable.

Dr. Buckell was in favour of the motion. Their first duty was to consider the public and not the traders, and therefore he hoped the Vestry would not give way to the suggestion made by the last speaker. It was a little suspicious that the Bill was introduced by persons interested in the trade who wanted to save themselves from prosecution for selling adulterated articles. What they were asked to do by supporting the amendment was to draw a blank cheque. When a Bill was read a second time, the House of Commons affirmed the principle of the Bill. What was the principle of the Bill they were asked by the amendment to support? He ventured to say that it was unjust, as by the Act it was absolutely impossible

to secure conviction against anyone who sold adulterated articles. Was the Vestry going to petition for such a thing as that? He hoped not.

The Amendment was put, and lost by 9 votes to 27. The original motion was then carried.

THE ESSEX COUNTY COUNCIL AND DR. CAMERON'S BILL.

At the meeting of the Essex County Council, held at Chelmsford, on Tuesday, Mr. T. A. Pooley (county analyst), made some remarks on the subject of adulteration law. He said that when defendants are charged under the Sale of Food Act the excuse is frequently made that they have only sold the article in the same condition as received from the wholesale dealer. In such cases justices naturally take a lenient view of the offence, and either dismiss the case or inflict only a nominal penalty. In the opinion of Mr. Pooley, the manufacturer or wholesale dealer can rarely be brought before the court, and "thus (he adds) the Act seems to bear with undue severity on the small retailer." A Bill ostensibly to remove this defect has been brought into Parliament, but a careful perusal of its provisions appears to indicate to Mr. Pooley that by the proposed amendment of Section 25 the Act would become practically a dead letter as against the retail trader, whilst the fraudulent wholesale dealer or manufacturer would equally escape, "since the Bill provides inadequate machinery for bringing him before the court."

SIR WM. HART DYKE'S BILL.

The Bill introduced by Sir Wm. Hart Dyke, M.P., for the Regulation of the Sale of Foreign and Colonial Fruit, has been printed. It provides that:—

Every person selling or offering for sale foreign or colonial fruit shall conform to the following regulations:—

Every package, whether open or closed, containing foreign or colonial fruit, shall be branded or otherwise durably marked "Grown abroad" on the top, bottom, and sides, in capital letters not less than three-quarters of an inch square; and if such foreign or colonial fruit be exposed for sale by retail, there shall be attached to each parcel thereof, so exposed and in such a manner to be clearly visible to the purchaser, a label marked in printed capital letters not less than one and a half inches square "Grown abroad"; and every person selling foreign or colonial fruit by retail save in a package duly branded or otherwise durably marked as aforesaid, shall in every case deliver the same to the purchaser in or with a paper wrapper, bag, or other receptacle, or accompanied by a ticket or label, on which shall be printed in capital letters not less than a quarter of an inch square the words "Grown abroad."

All foreign and colonial fruit imported into the United Kingdom of Great Britain and Ireland shall, whenever forwarded by any public conveyance, be duly consigned as fruit grown abroad; and it shall be lawful for any officer of Her Majesty's Customs or Inland Revenue, or any medical officer of health, inspector of nuisances, or police officer or constable, without going through any form of purchase, to take, for the purposes of legal proceedings, samples of any fruit not marked "Grown abroad" as required by the Act; and any fruit exposed for sale and not marked as aforesaid shall be presumed to be of British or Irish growth.

Any person who sells, offers, exposes, or keeps for sale, or supplies or causes to be supplied, or carries or causes to be carried any foreign or colonial fruit in contravention of any of the provisions of the Act shall for every such offence be liable to a penalty not exceeding £50.

All officers employed under the Sale of Food and Drugs Act, 1875, or any statutory substitute therefor, are empowered and required to carry out the provisions of the Act; but nothing therein contained shall affect the right conferred upon any individual not being a public officer to take legal proceedings under the Act and subject to its provisions.

Every penalty imposed and recovered under the Act shall be paid and applied as is provided by the twenty-sixth and thirty-third sections of the Sale of Food and Drugs Act, 1875, or any statutory substitute therefor, subject to the following proviso:—

That it shall be lawful for any court having cognizance of proceedings under the Act, in its own absolute discretion, to direct that the whole or any part of a penalty imposed and recovered under the Act be paid to the person, not being an officer of a public authority, who has proceeded for the same, to reimburse him for all the reasonable expenses incurred by him to which the court may deem him entitled.

DUTCH MILK *versus* ENGLISH MILK.

The importation of Dutch milk is increasing greatly in quantity, and it is all very highly borated. It is strange that no agricultural representative in the House of Commons concerns himself about this question. We can inspect our own dairies, but those of the foreigner are beyond our powers. The milk may come from disease infected areas, or even from cholera districts, and nothing so readily carries contagion as milk. Apart also from the danger of the use of this foreign milk it is so highly borated as to be dangerous for infants, and it is a strange thing how we allow foreigners to put into food they send to this country health injuring chemicals forbidden use in their own.

CIRCULAR NOTES.

DR. CAMERON ON LARD.

The following excerpt from a recent address by Dr. Charles Cameron, champion of the "Free Fraud" Bill, will cause those who know anything of lard to smile. Says the learned (?) doctor:—

"An English firm wrote to him saying that American raw lard was so very soft that it was requisite to use from 4 to 10 per cent. of beef suet to give it consistency, and in some districts that was treated as being to the prejudice of the consumer. This the firm considered was a great injustice to the trade, seeing that it was absolutely necessary to use the stiffening unless the oil were all pressed out from the lard, which would take away all the profit."

Every one, save perhaps Dr. Cameron, knows that the statement that beef suet is necessary to give lard consistency is untrue. As long ago as October 25th last, Mr. Bridge, at Huddersfield, utterly smashed the pretence that beef stearine was necessary, and on November 15th last the American firm who said beef stearine was necessary gave themselves the lie by advertising that they had abandoned that adulteration, and were only sending genuine hog fat lard to this country. This instance should show grocers how much credence they ought to give to Dr. Cameron's statements or opinions, and warn them of the kind of quagmire into which such guidance as his would lead them.

SMALL FINES ON MILK ADULTERATORS.

Leicester Town Council have been discussing the results which they have experienced from their efforts to put down adulteration of Milk. Alderman Windley put the matter mildly when he said he thought the Sanitary Committee regarded the decisions in some recent prosecutions as somewhat lenient, as well as irregular. One defendant, who adulterated milk with 8 per cent. of water, was fined the same as one who added 30 per cent. If, as old Clifton said, the milk supply of Leicester is not what it ought to be, the magistrates should co-operate with the Council in putting down adulteration by inflicting heavy fines.

In this connexion the *Leicester Daily Post*, in commenting on the recent conviction of a local milkseller for refusing to sell a sample of milk for analysis, says in its issue of 7th instant, that the Bench were fully justified in imposing a penalty of 40s. and costs, and expressed the hope that this may be accepted as a proof that we have seen the last of twenty shilling fines—of penalties, in other words, that were practically too lenient to be deterrent, or to make adulteration as unprofitable as it is injurious to the public health, but more especially to children.

CURIOUS SEQUEL TO THE PAISLEY MILK ADULTERATION CASE.

In our issue of March 11th we commented upon the extraordinary result of the prosecution on March 2nd, at Paisley, and showed the absurdity of the 1.92 per cent. Somerset House bovine monstrosity. It now appears that after the trial Mr. Kelso, sanitary inspector, visited the dairy from which the milk had been received and saw three of the cows milked. The proprietors were asked to pick out the three cows giving the lowest quality of milk. The three samples on being analysed were found to contain 3.64, 3.02, and 2.64 per cent. of fat respectively. Yet the Paisley sheriff found that with milk yielding 2.08 per cent. of fat the charge was not proven. The only sample of these that we could really call a normal one was the 3.64, and the result shows that of the three poorest the average was 3.1 of butter fat. What therefore can our readers think of the Somerset House 1.92 cow? The 3.02 and 2.64 per cent. cows in the present case were the worst in the herd, and ought to have been poleaxed instead of being milked. It is a great pity that analysts everywhere do not support the adoption of a standard fair to the consumer, as such a standard would lead to the improvement in the breed of cows, and to the production of animals yielding a uniformly high quality of milk.

MORE TINNED MEAT POISONING.

The Lancet, April 8th, says:—

"A family residing at Chelmsford partook of some American corned beef for breakfast on the morning of Wednesday, March 27th. The meat was observed to be slightly moist on the surface and did not drop out of the tin readily. It is also stated that the meat had a "spicy" flavour as of thyme. The mother, who is an elderly lady, about an hour and a half after breakfast complained of feeling giddy, and shortly afterwards persistent vomiting supervened, followed by cramps, spasm and diarrhoea. The father, son, daughter and a maid-servant were attacked shortly after, and for a time the life of the son was despaired of. All have now recovered. Unfortunately the remaining meat was destroyed. This, of course, is to be regretted, as in all such cases the unconsumed portion should be reserved for chemical and bacteriological examination. When examined a few days later the under surface of the tin was found to be corroded considerably more than was the case with other tins which had been kept a much longer time. In the scrapings of fat from the side of the tin both lead and tin were detected by Dr. Thresh. The symptoms, however, were undoubtedly those of ptomaine poisoning.

THE "IRISH BACON" FRAUD.

DECISIVE PENALTIES ON BOLTON TRADERS.

Important prosecutions by the Board of Trade under the Merchandise Marks Act were before the Bolton borough magistrates on the 10th ult. In the first case Frank Devine, a provision merchant with numerous shops, was charged with exposing at his place in Bridge-street bacon which was labelled "genuine Irish roll," this being a false trade description and a contravention of section 2 of the Act. Mr. Byrne, barrister, appeared for the Board of Trade, and called Mr. John Moore, secretary to the Provision Curer's Association of Ulster, and several expert witnesses, who testified to buying bacon at the shop of defendant, and said that false labels were attached. One witness stated that defendant's shopman admitted that the bacon was labelled "genuine Irish roll" and "Waterford bacon" to attract customers, and added, "If you go into any shop in Bolton you will find the same things." The bacon was American. The defence was that defendant could not be held responsible for the acts of his servants, to whom he had given instructions to "call a spade a spade." A fine of £10 and 15 guineas costs was imposed. Another case against the defendant was withdrawn, and notice of appeal was given on his behalf. Another Bolton tradesman named Thomas Shannon, of Weston-street, was next charged with exposing bacon falsely described as "Pale Wiltshire, home-cured." John Moore, witness in the previous case, deposed to buying bacon from the defendant, who said he would guarantee it as real Wiltshire. It was, however, American. The difference in the price between it and the genuine article was 4d. per lb. It was alleged for the defence that the label was on the bacon by mistake, and that the article was not sold as Wiltshire. This defendant was also fined £10 and 15 guineas costs. Mr. Byrne was the prosecuting counsel in this case also.

REFUSING TO SELL SAMPLES.

At Leicester Town Hall, on the 6th inst., Samuel Hull (53), dairyman, 79, Ruby-street, was summoned for refusing to sell to Tom Bent, an inspector, a pint of milk which he required for the purpose of analysis, on the 17th March. Mr. Storey (Town Clerk), who prosecuted, explained the section of the Act under which the prosecution was taken, and said it was an offence liable to a penalty not exceeding £10. Defendant kept a registered milk shop, and was also registered as a cow-keeper. On the morning of the 17th March. Inspector Bent called, and saw Mrs. Hull, and asked for a pint of milk. She replied that she had not got any. He asked her where the dairy utensils were, and she said that they had been washed and put away. He went into the kitchen, and there found a panchoon containing at least half a gallon of milk. At the side of the panchoon there were several small measures, which appeared to have been recently used. He told her he was an inspector, and she replied that she suspected that, but refused to serve him. At that moment defendant himself appeared, and his wife then told witness that the milk was skimmed milk. Witness then asked for a pint of it, but she still refused to serve him. Thos. Bent a sanitary inspector, gave evidence in support of the statement made by the Town Clerk. He added that defendant said to him, "I know what I am doing; I will not give you the milk. I can employ a lawyer as well as you." Defendant said he did not wish to ask the witness any questions, as what he had stated was correct. In defence he said at the time the inspector called he had two cows calving. He had been in the habit of buying every morning a gallon and a half of milk, which was sold at once, and never went into the shop. In the evening he bought a gallon of milk, and what was not sold of that was brought into the shop. If not sold there he skimmed it and made butter of the cream for their own use, and the milk was also kept for themselves. He called his wife, who stated that the inspector asked for new milk, and she could not sell him skimmed milk for new milk. He offered her 2d. for the milk, and it never occurred to her that she could have given him change. The Chairman said the magistrates had agreed to convict the defendant of what was an obstruction in law. There was no doubt a great deal of adulteration going on in the town, but there was a great difficulty in detecting it. Defendant was fined 40s., or 14 days. Defendant: I will do the 14 days.

At Dublin on the 23rd ult., Mrs. Murphy, 45, Bolton-street, was fined £5 for refusing to sell to food inspector Lyons a sample of milk for the purpose of having it analysed by Sir Charles Cameron.

KANSAS DOES NOT ADOPT DISGRACEFUL SOMERSET HOUSE STANDARDS.

Our contemporary *The Dairyman* says:—

"The proposed new dairy law for Kansas fixes the minimum quantity of butter fat in milk at 3 per cent."

The Dairyman has this significant comment, "a very low standard," which would seem to show that even the organs of the dairymen themselves regard the Somerset House standards as ridiculous and unscientific.

THE ALUM IN BAKING POWDER APPEAL.

CONVICTION UPHELD; APPEAL DISMISSED
WITH COSTS.

It is some eight months since we called attention to the use of alum in baking powder, and showed the absurdity of the Ilkeston decision. This week, after a protracted hearing of five days at the Glamorgan Quarter Sessions, Swansea, alum in baking powder has been held to be a harmful adulteration. It being a case of supreme importance to the manufacturers engaged in the preparation of the indicted alumed powder, and to the public who, it was stated, consume it in enormous quantities, an array of expert evidence never before seen in an adulteration prosecution confronted the magistrates on the 5th inst. at Swansea. On the Bench were Mr. J. C. Fowler (chairman), Judge Gwilym Williams (deputy-chairman), and Mr. E. Daniel. The appeal was brought by James James, a grocer of Blaenrhondda, against a conviction at the Pentypridd Petty Sessions in February last, under the Food and Drugs Act, for selling baking powder containing alum, but Mr. James was only the nominal applicant, the case being fought on behalf of the makers of the Excelsior Baking Powder. Mr. Brynmor Jones, Q.C., M.P., Mr. Blofield, and Mr. Arthur Lewis, instructed by Messrs. Tillet and Co., of Norwich, were for the manufacturers of the baking powder; and Mr. David Lewis, Recorder of Swansea, and Mr. Rhys Williams, instructed by Mr. W. E. R. Allen, of Cardiff, were for the County Council. Superintendent Evan Jones proved the purchase of the powder, and produced the analyst's certificate, which showed that the powder contained 39 parts of alum, and stated that in the analyst's opinion the use of alum in bread was prejudicial to health. The quantity he received for a penny would cost 1-20th part of a penny to produce. The correctness of Dr. Morgan's certificate was not disputed. Dr. W. Morgan, of Swansea, the county analyst, said by following out the instructions printed on the packet, a 4 lb. loaf would contain 360 grains of baking powder, and four-tenths of that would be alum. The reaction between potash, alum, and bicarbonate of soda is the production of hydrate of alumina, sulphate of soda, sulphate of potash, carbonic acid, and water. The hydrate of alumina might be taken as being 1-6th of the alum. When the bread was eaten the hydrate of alumina was dissolved by the gastric juices of the stomach, and the result was that chloride of aluminium was formed. He tested this by he and his son taking a full meal on Sunday. His son took with his food hydrate of alumina produced from a packet of the baking powder in question. Witness took his meal without the alumina. Under the supervision of Dr. Griffiths they both took a mustard emetic and vomited. To his own vomit he added alumina hydrate, but to his son's he did not. He subjected the vomited matters in both cases to dialysis through vegetable parchment, and proved the presence of chloride of aluminium in the dialysate, thus demonstrating that hydrate of alumina was actually dissolved by gastric juice. He repeated these experiments thrice. Mr. Otto Hehner, a past president of the Society of Analysts and analyst for several counties and boroughs, said for twenty years he had made the analysis of food a special study. He agreed with Dr. Morgan, on the result of experiments, that hydrate of alumina was readily soluble in the gastric juice. He had experimented upon loaves of bread made with the identical baking powder that was the subject of the prosecution, and upon other loaves containing alum. He found that in both cases the alumina could be readily extracted with dilute hydrochloric acid of half the strength of normal gastric juice, viz., 0.1 per cent. In his opinion there was no difference between bread made with alumed baking powder and such as was made with alum only, the latter being universally acknowledged as unfit for food. Its introduction into the stomach would be very bad for one indeed. Professor Thomson, professor of chemistry at Cardiff University College, gave it as his opinion that hydrate of alumina was soluble in the stomach. Professor W. R. Dunston, M.A., Oxford, and lecturer at St. Thomas's Hospital, London, stated that he had fed a man and animals upon bread made with the baking powder in question, and had detected alumina in their urine, proving that some soluble salt of alumina had gone into the circulation.

Dr. Thomas Lauder Brunton, F.R.S., the eminent physician, and author of several text books on the digestion, etc., said it was a fact that the action of alum caused gastric disturbances. He had heard the experiments Dr. Morgan performed, and these seemed to him to afford conclusive evidence that the hydrate in the stomach was changed into chloride, the cause of the change being the hydrochloric acid of the gastric juice. The effects of chloride of aluminium would be the same as of alum qualitatively. Whether they would be the same quantitatively or not he was unable to say. In his opinion the presence of chloride of aluminium would be injurious.

For the defence Mr. Francis Sutton, public analyst for

Norfolk, stated that hydrate of alumina was according to his experiments quite insoluble in gastric juice. He also had made experiments upon the vomited matter of a man who had taken a pound of bread made with the alumed baking powder, and had not been able to obtain any chloride of aluminium by dialysis.

In cross-examination he said that he had used instead of vegetable parchment, for his experiments a sheep's bladder, and he was severely interrogated upon a fact that should have been well known to him that animal membranes could be tanned with soluble alumina salts and combined with the alumina, so that it would have been impossible to find aluminium chloride in the dialysate. Mr. Sutton produced a tube containing a small quantity of alumina as representing the quantity of aluminium hydrate, which would be present in an ordinary loaf of bread made with the baking powder, but he had to admit that the substance which he produced was not alumina hydrate at all.

Dr. Arthur Pearson Luff, one of the analysts to the Home Office, stated that he had also made experiments which convinced him of the insolubility of alumina-hydrate in gastric juice. He alleged that the amount of free hydrochloric acid in gastric-juice was not 0.2 per cent. but 0.02 per cent. according to the *newest researches* as given in Haliburton's work on physiology, but Dr. Luff on being cross-examined, had to admit that the sole experiment that gave 0.02 of hydrochloric acid in gastric juice, was made upon a patient having a fistula, and that the result was declared by Haliburton himself to be abnormal, whilst 0.2 per cent. was given by him as the proper amount. Further it was elicited that the sole figure upon which Dr. Luff relied, was not *new but had been published in 1852*. It further came out that the alumina hydrate which Dr. Luff had used in his experiments had been heated to at least 150 degrees centigrade and Dr. Luff had to admit that it was probably not alumina hydrate at all, but a substance which he called an *oxy-hydrate*. Dr. Luff had taken 5 grains of this oxy-hydrate, and treated it with 40 cubic centimetres of dilute acid containing 0.02 per cent. of hydrochloric acid, but it was shown that in order to dissolve these 5 grains, not 40 cubic centimetres, but 2,200 centimetres ought to have been taken. Dr. Benjamin Ward Richardson, who modestly admitted that he was the "celebrated" Dr. Richardson, said he had paid great attention to the manufacture of bread, with special reference to alum adulterations. He had investigated the action of alum in bread, and concluded that it had been used to check excessive fermentation. He thought while bread largely impregnated with alum produced indigestion and constipation, Excelsior Baking Powder, which entered the body as hydrate, was not injurious to normal healthy individuals. Even if some alumina entered the system, which Dr. Richardson declared was impossible, some alumina was always introduced into every person by the dust inhaled, which contained in every case *alum*. He had never heard of any dangerous disease produced by the use of alumed baking powders.

Mr. A. Wynter Blyth, and a number of local medical practitioners, also gave evidence in defence of alum in baking powder. The Bench, after about twenty minutes consideration, dismissed the appeal with costs, and confirmed the conviction. The old question introduced by the Recorder of Cambridge that baking powder was not an article of food was raised, but brushed aside by the bench as unworthy of serious consideration.

ANOTHER USE FOR SKIM MILK.

We last week referred to Mr. J. Carter Bell's suggestions for the utilization of skim milk. Mr. J. E. Dorman, in *Hoard's Dairyman*, has the following:—

"FEEDING SKIM MILK TO COWS.

"I noticed a few weeks ago mention was made of feeding skim milk to milch cows, and would like to hear from others who have tried it.

"We have been practicing it here with very good results. The milk is taken directly from the separator and given to the cows while yet warm and sweet. In every case the flow of milk has been increased, some cows showing an increase of 15 pounds a day.

"The herd is made up mostly of pure-bred Holsteins, and are naturally large eaters; but I notice those that get skim milk do not eat as much hay as before. When a cow gets a good drink of warm milk just before she is called upon to contribute her share of the produce, she is perfectly contented to stand still and do so with a good grace. Should any one have trouble in getting the cows to drink, a little grain mixed with the milk will, in most cases, induce them to taste it, and when once they get to drinking they become very fond of their warm drink.

"This part of the territory is over-stocked with cattle, and this of course makes dairy produce very cheap; but the dairy farmers are beginning to waken up and see that they have to use more science in their business in order to make anything from it. They are now improving their herds by introducing blooded stock from the East. And some of the largest dairy farms have secured experienced butter makers. Dairy papers are read with great interest, and if the ball is kept rolling, I see no reason why this valley cannot, in a few years, become one of the best dairy counties of the West."

THE CONDENSED MILK APPEALS.

At the Guildhall, Westminster, on the 8th inst., appeals in the cases of Alfred Platt, 50, Ealing-road, Brentford, grocer, and Frederick Wright, 55, Hamilton-road, Brentford, came on for hearing. Our readers will remember that Alfred Platt's conviction took place on December 31st last, when the justices for the Brentford Petty Sessional Division convicted him for selling condensed milk from which 80 per cent. of fat had been abstracted before concentration contrary to the provisions of Sec. 9 of the Sale of Food and Drugs Act, 1875. Penalty £10 and costs.

Frederick Wright was a conviction for selling condensed milk from which 50 per cent. of fat had been abstracted before concentration. Penalty £3 and costs.

The bulk of the makers of spurious condensed milk, had solicitors present to represent and watch their interests, and Professor Atfield, gave evidence of the usual character for the defendants' skimmed milk. The magistrates reserved their decision for three weeks, without expressing an opinion one way or the other upon the case in its present stage. We think it is high time expert food analysts protested against the impertinence of professors who, whatever they may know of other branches of science, are not competent to give an opinion on foods worth the breath expended in uttering it, posing as high authorities upon questions quite outside their province and training. At Swansea this week in defence of alum in baking powder, a shoal of experts were ready to testify that alum in baking powder was not injurious. Happily however, the bench had too much common sense to be swayed by the testimony, and refused to credit the assertion that alum in baking powder was not an adulterant. But what kind of opinion must the mass of the public as well as magistrates entertain of the medical and chemical profession, when they find its leading lights adopting such strange attitudes?

DISCREDITING THE ANALYSTS.

In the last issue of one of the wretched advocates of fraud upon retail grocers and the public, appears the following:—

THE WORK OF PUBLIC ANALYSTS.

SIR,—I have read with very great interest "Fair Play's" letter in your issue of the 1st, and thoroughly agree with him that the public should have some guarantee of protection against the whims of public analysts.

Ever since the death of Mr. Wigner, the Society of Public Analysts has been controlled by what is known as the Inner Circle, or Brotherhood, which consists of six members of the society, led by a foreigner; and it is instant excommunication for anyone to oppose or disagree with this autocratic clique, the party offending being looked upon as a traitor, and boycotting in one of its worst forms resorted to.

The inconsistency of the men who are manipulating this society (clearly for their own benefit) is strikingly exhibited in the late resolution passed by them—viz., in objecting strongly to medical officers of health holding the appointment of public analysts, when Sir Charles Cameron holds the dual appointments. He may well exclaim, "Save me from my friends!"

We have now a Minister of Agriculture, and the trading public should combine and insist upon the present Act being replaced by a new one; the present public analyst totally abolished, and his place taken by a well-paid State or Government analyst, who is debarred from private practice, and whose duty would be equally the protection of the wholesale and retail traders as well as of the general public. There are at the present moment three public analysts in London holding appointments under the Act contrary to the 10th section of same.

I am, &c.

WILLIAM JOHNSTONE.

The City Central Laboratory and Assay Office,
13, Fish-street-hill, Eastcheap, E.C.

In the *Analyst*, February, 1891, this Mr. Johnstone gave to science some statements very startling, but equally as unworthy of credence as those in the above letter, but like *Punch's* famed cartoon of Lord John Russell as a small boy chalking "no popery" on a wall, and running away, Mr. Johnstone withdrew the whole of his theories, doubtless hoping to avoid a scientific castigation, which, nevertheless, he got. As the Society of Public Analysts repudiated any connection with Mr. Johnstone's fragments of transcendental chemistry known to himself alone, so they repudiated Mr. Johnstone himself as a member for reasons, which if Mr. Johnstone cares to send them to us for publication will be gladly inserted by us, as they may explain the snarling attack on the Council of the Society of Public Analysts. If the Society of Public Analysts be a ring, it is remarkable that by a unanimous vote in general meeting specially called to consider his case, Mr. Johnstone's name was removed from their list of members; and that the Institute of Chemistry—a body not controlled by public analysts, but by professors and lecturers, in which public analysts are not dominant, also adopted a like course.

ADULTERATION PROSECUTIONS.

MILK.

EXEMPLARY PENALTIES AT PLYMOUTH.

The Plymouth Bench had before them on the 6th inst., a large number of milk adulteration cases, the prosecutions being conducted on behalf of the Corporation by the Town Clerk (Mr. J. H. Ellis). The first case dealt with was that of John Henry Smallridge, dairyman, of Zetland-place, Plymouth, Mr. F. W. Skardon defending. Inspector Addiscott proved purchasing milk from defendant, and the certificate of the public analyst (Dr. Bean) showed that 12·2 per cent. of water had been added. In defence, Mr. Skardon pleaded guilty, but in extenuation urged that his client was quite unable to tell how the milk became adulterated. So confident was he, in fact, that the milk was pure, that he had, on his own account, submitted a sample to Dr. Wynter Blyth, the well-known analyst, whose certificate, however, in the main agreed with that of Dr. Bean. Mr. Skardon threw out the suggestion that milk varied in quality in accordance with the feed of the animal, and he thought it was possible to have water in milk untampered with. The Bench withheld their judgment on the case until the others had been heard.

Mr. P. T. Pearce defended William Moses, of 124, Exeter-street, who was charged with adding 37 per cent. of water to raw milk; and Mr. T. Wolferstan appeared on behalf of William White, of Bowden Farm, Egg Buckland, an analysis of a sample of his milk showing added water to the extent of 6 per cent.

Charles Newman, of 43, Grenville-road, who was proved to have disposed of milk containing 20 per cent., was represented by Mr. A. E. Akaster, defendant pleading guilty.

William Hannaford, of 33, Notte-street, was charged with having sold milk adulterated with 14 per cent. of water; William Weeks, 2, Holborn-place, with having 27½ per cent. of water in milk sold by him; A. R. Murch, of 7, Jubilee-place, 28 per cent.; J. Popham, 7, Looe-street, 10 per cent.; M. Gilberd, 1, Stuart-terrace, 27 per cent.; H. Mason, 18, Southside-street, 17·7 per cent.; and C. Lee, 4, Lower Batter-street, 10 per cent. Nearly all the defendants alleged that they were unaware that the milk had been adulterated, having purchased it from farmers and milk vendors. In Mason's case the inspector said that when he informed Mrs. Mason that the sample bought was for analysis she wanted to change it, saying that she thought he asked for infants' milk. (Laughter.) Hannaford, who was charged with selling adulterated milk to a dairyman in Notte-street, proved that such was not the case, and the Bench dismissed the case.

After a long deliberation the Bench inflicted the following penalties:—Smallridge, £5 and costs, or 14 days' imprisonment; Mason, £5 and costs, or 14 days; Popham, £4 and costs, or 10 days; Lee, £4 and costs, or 10 days; Weeks, £7 10s. and costs, or one month; Gilberd, £7 10s. and costs, or one month; Moses, £10 and costs, or one month; Newman, £7 10s. and costs, or one month; White, 42s. and costs, or one week; and Murch, £7 10s. and costs. The Mayor (Mr. W. Law), addressing the delinquents, explained that whether they purchased milk from others or had their own cows, they were responsible for the quality of the milk. For the past three months several charges had been dealt with by the Bench, and they were sorry to see that the penalties inflicted then had not deterred others from contravening the Act.

At the Birkenhead Police-court on the 7th inst., the following was fined under the Food and Drugs Act:—Richard Hooper, 264, Borough-road, 5s. and costs for selling adulterated milk.

At the Lambeth Police-court on the 4th inst., Mrs. Elizabeth Jones, of Ilderton-road, was summoned by Inspector Eagle, for the Camberwell Vestry, for selling milk containing 20 per cent. of added water. Fined 40s., and 12s. 6d. costs. Thomas Jones, Lugard-road, was also convicted for selling milk adulterated with 9 per cent. of water. Mr. Sheil imposed a penalty of £3, and 12s. 6d. costs.

At the North London Police-court, on the 1st inst., Charles Rose, dairyman, of Windsor Farm Dairy, Woodberry-terrace, Stamford-hill, was summoned by Inspector Tomlin, of the Middlesex County Council, for selling milk adulterated with 20 per cent. of added water. The adulteration was proved, and the defendant pleaded that he sold the milk as he bought it. Mr. Mead: Have you no warranty with the milk? The defendant: No. Mr. Mead: You should have if you wish to protect yourself. 30s. fine, and 10s. 6d. costs.

At the Wolverhampton Police-court, on the 7th inst., John Ball, milk seller, of Ablow-street, was charged with selling milk which contained 9 per cent. of added water. The milk was purchased from the defendant's boy by Samuel Blanton, inspector under the Food and Drugs Act. Mr. A. Turton, who defended, said the defendant was a tradesman in Wolverhampton of long standing, and had sold the milk in the same state as he received it. A fine of £3 and costs was imposed.

[CORRECTION.—In our issue of the 8th inst., we reported that Mrs. Jane Thorn, of Draper-street, Walworth, was fined £5 for having sold diluted milk, and stated that she admitted having been fined before. We are now informed that she made no such admission, and that it is not true that any charge had ever been previously brought against her. We also learn that the fine of £5 was subsequently reduced by Mr. De Rutzen to £2. We very much regret the error which was made, and tender to Mrs. Thorn our sincere apology.]

LARD.

At the Glendale Petty Sessions, Wooler, on the 4th inst., two retail dealers named Steel and Patrick were each fined 2s. 6d., and £1 0s. 3d. costs, for having sold lard which was declared by the county analyst to be adulterated with 25 per cent. of beef stearine. For the defence it was pointed out that the lard had been sold by a grocer in Berwick to the defendants just as it came from the wholesale firm at West Hartlepool, and that a part of the sample purchased by the police had been sent to Professor Iveson Macadam, Edinburgh, who declared that it was pure and of good quality. The prosecution pointed out that the retail dealers should have a written warranty from the wholesale firm.

At the Sunderland County Petty Sessions, William Stewart, of Ryhope, was charged under three summonses—firstly, with selling lard adulterated with 10 per cent. of beef fat; secondly, with selling margarine for butter; and, thirdly, with having sold margarine without it being notified on the wrapper. Mr. B. Scott-Elder, Chief Inspector for the County of Durham, appeared to prosecute, and Mr. A. T. Crow, jun., defended. Mr. Scott-Elder in addressing the Bench intimated his willingness to withdraw the third charge on payment of costs by the defendant. George Wilson, assistant to Mr. Elder, proved the charges, and the Bench said there had been a gross fraud on the public. They fined the defendant 20s. and costs in the case of the lard, 40s. and costs in the case of the butter, and ordered him to pay the costs in the margarine case. They further intimated that should any similar cases be brought before them they would be severely dealt with.

At the City Police Court, Manchester, on the 5th inst., Alfred Douglas Slinger, provision dealer, City-road, was summoned under the Food and Drugs Act for selling lard which was found to be adulterated. Mr. A. T. Rook, superintendent of the Sanitary and Hackney Coach Department of the Corporation, appeared in support of the summons. He said that the inspectors of the Corporation were so well known that the task of purchasing the lard had been entrusted to a woman. She was served at Mr. Slinger's shop with a pound of lard, for which she paid sixpence. There was nothing to indicate to the purchaser that it was a mixture. Mr. Charles Estcourt, city analyst, said he analysed a sample of the lard, and found that it contained 40 per cent. of foreign fat, viz., cotton seed oil and beef stearine. The defendant did not appear in court, but a man in his employ responded to the summons. He was told that he could not be heard. The defendant was fined 40s. and costs. John Doherty, provision dealer, City-road, for a similar offence, was also fined 40s. and costs. There was no label on the paper in which the lard was wrapped, and the defendant said he was not aware until now that it was necessary to label the mixture. He did not supply the article to the woman. She was served by an assistant, who said that he informed her that it was of poor quality. She said that the shopman told her that the lard was not the best, but it was very good. He said nothing about the article being a mixture.

COFFEE.

At Paisley Sheriff-court, Kate Shields, tea and coffee merchant, Main-street, Anderston, Glasgow, carrying on business at 18, Moss-street, Paisley, was at the instance of the sanitary inspector, and at the same Court, charged with having, within the shop in Moss-street on 15th February, sold to Mr. Kelso 1lb. of coffee which was not of the natural substance and quality of the article demanded, in respect that it contained 60 per cent. of chicory, contrary to the Sale of Food and Drugs Act, 1875. A plea of guilty was tendered, and a fine of £1 1s., with £1 9s. of expenses, was imposed, failing payment within a specified period, 14 days' imprisonment.

MARGARINE ACT PROSECUTIONS.

At Paisley on the 23rd ult., Peter Baird, provision merchant, 108, George-street, Paisley, was fined £12 10s., including expenses, with the alternative of forty days in jail, for having, on 15th February, exposed for sale and sold to the sanitary inspector, Mr. William Kelso, margarine without having the name of the article printed in characters of the statutory size and attached to each parcel.

At Birkenhead on the 7th inst., Frank Lawton, 60, Priory-street, for not labelling margarine, was fined 20s. and costs, also 10s. and costs for a second offence; John Lucas, 30, Bridge-street, St. Helens—who keeps a stall in the market—20s. and costs, and 10s. and costs for a similar offence.

At Bootle Police-court, on the 21st ult., Ellen Connolly, provision dealer, of 110, Litherland-road, Bootle, was summoned for having offered for sale margarine that had no label affixed. Inspector Ferguson stated that on the 7th ult. he visited defendant's premises and asked for one pound of butter, which he requested should be supplied from a lump on a shelf. Mrs. Connolly informed him that it was margarine. There was no label, however, as required by the Act, to indicate this. The Chief Constable remarked that the practice of selling margarine for butter was far too common in the town, and especially in small shops. If the defendant had not known that the inspector intended to send the samples to an analyst the probability was that she would not have mentioned that it was other than butter which she had supplied to him. The Bench said that as this was the first offence the defendant would only be fined 10s. and costs, or in default seven days' imprisonment. A much heavier penalty would be inflicted if the offence were repeated.

At Dublin on the 23rd ult., Mr. Edward Gilligan, a provision merchant, 73, Ballybough-road, was summoned by food inspector Lyons, for exposing for sale a firkin of margarine without being labelled in accordance with the provisions of the Margarine Act. Mr. Lyons said that Mr. Gilligan told him he sold it as old butter. Mr. Ennis, solicitor, who appeared for Mr. Gilligan, said that his client was twenty years in business, and there was never a complaint against him. Mr. O'Donel imposed a fine of £5.

At the Rotherham Borough Police-court, on the 6th inst., before the Mayor (Alderman W. H. Gummer), Alderman George Neill, Alderman George Wragg, Mr. J. M. Habershon, and Mr. E. Hickmott, John Bosworth, of 93, Newhall-road, Sheffield, was charged with a breach of the Margarine Act, 1887, by not having properly labelled a quantity of margarine on a stall, in the Rotherham new Market, on the 4th ult. Mr. H. H. Hickmott (Town Clerk) prosecuted on behalf of the Rotherham Corporation, and said in consequence of certain communications made to the food authorities of the borough, Mr. Charles Edward Parkin, the younger, and deputy inspector, visited the defendant's stall in the new Market Hall. Upon it there was a substance, which appeared to be butter, marked 10d. the lb. Mr. Parkin went to the defendant and asked him for 1lb. of butter at 10d., and defendant sold him a pound of this stuff. After he had made the purchase, Mr. Parkin told the defendant it was for the purposes of analysis. The defendant then said it was not butter, but margarine. The margarine had not been wrapped in a paper upon which the word margarine was printed. Upon analysis, it was ascertained that there was only 15 per cent. of real butter in the substance. The defendant stated he had been in the market nine years, and the nature of his business was well known to the public. Fined 10s. and costs. Robinson Brown, of 17, South-street, Moor, Sheffield, was similarly charged. In this instance there was only 10 per cent. of butter in the substance. Defendant had upon his stall exposed for sale by retail a quantity of margarine not properly labelled. Mr. Parkin, sen., said he asked for a pound of butter, and was told that it was not butter, but margarine. There were no labels, but on the packet sold there was written on the wrapper the word margarine. Fined 10s. and costs.

CORRESPONDENCE.

To the EDITOR of FOOD, DRUGS AND DRINK.

119, Cannon-street, London, E.C.

SIR,—We write to call your attention to the increasing practice of mixing exhausted ginger, with the ginger of commerce, for grinding purposes. With the increase of gingerbeer making there has been a very much larger production of so-called "spent" ginger, and it is being used to such a degree that the trade of honest spice grinders and dealers is being most seriously interfered with. Even large houses openly quote ground ginger at 20s., or more, per cwt. less than the proper price of the pure article. The present lowest market cost of the very commonest ginger suitable for grinding is 56s. per cwt. The cost of grinding is, at least, 7s., making a first cost of 63s. per cwt., and allowing 5 per cent. for profit, say, 66s. per cwt. Yet wholesale houses, doing a large trade, are quoting ground ginger at more than 25s. per cwt. under this price, and guaranteeing it to be "genuine." Comment is needless, and it is only the strong arm of the law that can deal with such cases, and act in the place of absent consciences. It is an unfortunate fact, also, that the buyers of ginger are more or less guided by colour, instead of by flavour, taste and aroma, and that the spent-ginger, owing to the soaking which it has undergone, is lighter in colour in grinding than unexhausted ginger. The spent-ginger left after the manufacture of cordials and essences by wholesale chemists and others, is also largely used in ginger grinding, although it is almost absolutely devoid of the qualities of proper ginger. Owing to the great rise in the price of whole ginger, this fraud is developing to a remarkable degree, and it is at present entirely unchecked by our existing adulteration laws. There is a similar abuse current by which exhausted caraway seeds are either ground or mixed off with caraways of full strength.

Another great abuse in the spice trade is the sale of black-pepper husks under the name of pepper, a fraud which ought most certainly to be stopped.

Your attention does not appear to have been directed to the recent magisterial decisions to the effect, that, while a chemist or druggist is bound to sell pure liquorice, a confectioner may sell what he pleases under that name, on the ground that he is a dealer in sweetmeats. If these decisions are not interfered with or altered, we can only say that the trade in one of the finest demulcents known will very rapidly be destroyed. As it is, some large wholesale houses unscrupulously quote as pure, and, we believe, guarantee the purity of liquorice, each stick of which is marked, under the French laws, as containing 70% of adulteration.

These instances, and others which we could quote, have convinced us that if honourable wholesale traders are to continue in business, it is absolutely necessary that the public officers should have access to all wholesale salerooms, warehouses, etc., and that all food factories should be liable to official visits. We also think that fines are quite insufficient to stop wholesale frauds, and that adulterated goods should certainly be seized and destroyed.—We are, Sir, yours faithfully,

For JOSEPH TRAVERS & SONS, LTD.
J. J. ROGERS, Chairman.

10th April, 1893.

“MALT-COFFEE.”

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT - COFFEE COMPANY.

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THE SANITARY INSTITUTE OF GREAT BRITAIN has always given the Highest Awards, when tested against other so-called Disinfectants, to

Calvert's No. 5 Carbolic,

which is of the quality adopted as “Standard” by the British and German Governments after bacteriological tests. Unscrupulous statements that other Disinfectants are superior to genuine Carbolic Acid should be treated with the distrust they deserve. Sold by most Chemists in 8 and 16 oz. bottles, at 1s. and 1s. 6d. each; $\frac{1}{4}$, $\frac{1}{2}$, and 1 gallon tins, 2s. 6d., 4s., and 6s. 6d. each; or larger lots at rates on application to

F. C. CALVERT & CO., MANCHESTER.

60 MEDALS, &c.

IMPORTANT NOTICE TO OUR READERS.

Commencing with this issue, we have changed the title of FOOD, DRUGS, AND DRINK to

Food & Sanitation,

We take this opportunity of thanking the Medical officers of Health, Public Analysts, Food and Drug Inspectors, Sanitary Inspectors, Weights and Measures Inspectors, grocers and members of local authorities who have written us commending our efforts, and we hope that the improvements we contemplate, will make the paper still more valuable to our subscribers and the public. We would be glad if Medical officers and others sending us reports would, where possible, send them in duplicate.

SPECIAL NOTICE TO OUR READERS.

We would be pleased if readers of this journal, in enquiring for samples of any of the preparations advertised in it, would mention the name of the journal in their enquiry.

SANITARY AND FOOD AND DRUGS INSPECTORS' DIFFICULTIES.

Many of our subscribers having pointed out to us how useful a column for questions and answers would be, we have pleasure in informing our readers that we have arranged with eminent sanitary, analytical, and legal experts, who will be pleased to answer and advise gratis through this column, upon any questions of procedure or difficulties on which information is required.

THE IRISH CONSTABULARY AND BUTTER ADULTERATION.

At the last meeting of the Wexford Corporation the Town Clerk read a letter from the County Inspector's office offering the services of the constabulary as inspectors of food, etc., under the Food and Drugs' Act, 1875. In the letter attention was drawn to the increasing practice of butter adulteration. Alderman Ryan moved that the letter be referred to a committee. It was a most important matter, as much injury was done to the butter industry of Ireland by the conduct of unscrupulous persons. Alderman Clappett: Will they require payment. The Town Clerk: No. They offer their services gratuitously. Councillor Wyley seconded, and it was unanimously passed.

Food and Sanitation.

SATURDAY, APRIL 22, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE HOUSE OF COMMONS AND AGRICULTURE.

THE timely act of the Hon. A. de Tatton Egerton in blocking Dr. Cameron's bill shows that at last a few members of the House of Commons are beginning to grasp the real causes of the decline in English agricultural prosperity. The Hon. A. de Tatton Egerton, until Mr. Johnson's accession to the ranks of parliamentarians, was the only member of the House of Commons who took more than a surface view of the serious question of England's agricultural prosperity, not that there are wanting earnest men in the House of Commons, but somehow this question of the effect of universal frauds upon agricultural prosperity has never received a tithe of the attention it merits. This is extraordinary and disheartening, for it is practical common sense views of agricultural problems, rather than vain agricultural union schemes or protectionist yearnings, that our decaying agricultural industries want. We have an ocean of talk, ponderous, oratorical, and sonorous, but with the few exceptions of Professor Long, the Hon. A. de Tatton Egerton, Mr. Heywood Johnson, and one or two others, those who trouble about agricultural problems offer panaceas that are about as useful as Mrs. Partington's broom. In one article—that of milk—English farmers and the public are defrauded of an amount of money that must be enormous, for in London alone it reaches many hundreds of thousands of pounds per year. A view of Paddington Station at early morn affords an object lesson which we wish with all our heart members of Parliament would avail themselves of. There, on the very platform, in the most open, barefaced manner, the milk from the country is adulterated *en bloc* before distribution to London consumers. The *modus operandi* employed by the London dairymen is to take twenty gallons of pure milk containing say 3·57 per cent. of fat, which is the average yielded by genuine milk during the present month. To this eight gallons of separated milk from which all the cream, save about 0·25 per cent. has been abstracted are added, making a mixture in which the total fat amounts to 2·62 per cent., which is above the amount that the analytical referees of the Inland Revenue laboratory at Somerset House will pass as genuine. But the total solids, not fat, are slightly increased, and a gallon or more of water may safely be added to bring the solids, not fat, down to the standard of fraud not only permitted, but, what is worse, absolutely fostered by official referees. This makes 29 gallons sold to the public for which the farmer only receives milk value for 20 gallons of genuine milk. Taking it at an ordinary price, 20 gallons pure milk, at 3d. per quart, £1; 8 gallons of separated milk at 1d. per quart, 2s. 8d.; 1 gallon water costs nothing: the total cost is £1 2s. 8d.; for which the milkman receives £1 18s. 8d. It requires no emphasis on our part to show at once to farmers and the public how much is lost to agriculture by this fraud, and how much is deliberately robbed from the consumer;

but the astounding thing to our mind is, that members of parliament professing an earnest desire to promote English agricultural prosperity should for so long have shut their eyes to the ruin free fraud has brought upon it. In well-nigh every issue of this journal, since the date when we established it nine months ago, we have pointed out how free fraud of an analagous nature has worked its fell way in damaging our butter, cheese, pig-curing, barley-growing and many other industries; and the member of Parliament who would thoroughly master this really important national question, and in season and out of season press it before the House of Commons, would really benefit his country. The same disregard that is shown in Parliament reveals itself in our Courts. With a very few exceptions, magistrates fail to appreciate the gravity of the fraud, and inflict ridiculous fines where they do convict.

It is sufficient for the milk-dealer who practices those we instance above to produce his warranty, and the magistrates not only dismiss the cases, but fine the vestries heavily for their efforts to protect the public. Only recently we chronicled the case of one large London milk-dealer who had been several times prosecuted for vending adulterated milk, and each time escaped on the "warranty" clause of the Acts. He boasted to the inspector that he would continue to vend milk adulterated with "separated" milk in spite of any efforts of officials under the Acts to stop him. In one West London parish, samples were recently taken of milk from two firms, the very largest in the Metropolis. One firm's milk was full cream milk, 3.75 to 4 per cent., the other firm's milk averaged 3.50 per cent. of fat, but in an adjacent parish the same firm's milk only showed 2.50 per cent. of fat—proof conclusive of fraud—yet no prosecutions ever occur in that parish, even when the milk shows less than 2.50 per cent. of fat, because the analyst for the district persistently refuses to certify and condemn the fraudulent milk as adulterated. As the firm who thus swindle the public clear an extra profit of at least £3,000 per year, they can, as they no doubt do, well afford to pay the analyst to acquiesce in this robbery. It is pitiable, in the face of conditions such as these, that but one or two members of the House of Commons should concern themselves with the question of adulteration, and that so many should be misled and inclined to support Dr. Cameron's Sale of Food and Drugs Act Amendment Bill, which, if it ever becomes law in its present state, will not only supply the coffin, but securely bury the corpse of English dairy farming. Already we have the bulk of the butter sent us from our continental competitors, not only adulterated with ten to twenty per cent. of margarine, which allows the foreigner to undersell our own butter producers by 5s. to 10s. per cent., and reduce the value of home produce to this fraud-created standard, but we have the Hamburg and other gangs of butter swindlers mixing extra water, and putting into their produce objectionable preservatives forbidden use in food in their own countries. The Hon. de Tatton Egerton's action is one, therefore, that we hail with satisfaction as patriotic, honesty-encouraging and far-sighted. Swift, who saw the meanness of intrigue, ignorance and verbiage that in his day passed as high-politics, uttered no truer saying than "whoever could make two ears of corn, or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together." The politician who would rouse parliament on this bread and butter question; who would expose the free fraud, everywhere rampant, that is killing agricultural prosperity in these islands, and who would promote patriotic comprehensive and just legislation to protect the public from such fraud, would do a work than which none could be nobler, more beneficial, or worthier of recognition by the mass of England's people.

MEAT EXTRACT REVELATIONS.—II.

THE results disclosed by the analyses of Coleman's Wincarnis, and Valentine's Meat Juice, which were published in our issue of January 28th, were so startling that they have brought us many letters from medical men and chemists who had not thought of questioning the worth of the preparations, but had prescribed and sold them in good faith, influenced our correspondents tell us, by the shoals of testimonials and laudatory analyses nearly always scattered broadcast with proprietary foods. To most of our correspondents the revelations as to the constituents of the hugely testimonialised Wincarnis and Valentine's Meat Juice came as a surprise, and the requests for the remainder of the series have been so numerous that in deference to the wishes of our readers we give another instalment in this issue. It will be remembered that two analyses of Coleman's Wincarnis revealed the fact that the total nitrogen present was only 0.087 and 0.082 per cent., and that Valentine's Meat Juice contained only a total of 2.48 per cent. of gelatine, albuminoids and peptone, for which the astonishing price of 3s. for a bottle, containing about two ounces of fluid is obtained from the public. No more striking proof of the need for an official censorship being exercised over proprietary preparations could well be given, than the fact that the market is flooded with meat extracts, patent foods, &c., nearly as valueless as those already dealt with in our columns, each of which is lauded as a complete food, and that often enough the least valuable is that most prescribed for invalids.

Such being the case, and no censorship being in existence, it is more than ever necessary in the public interest that consumers, but more especially the invalid and the convalescent, should have a means of knowing the truth about the foods most recommended, advertised, and used.

In the trial of Mrs. Maybrick for murder, it transpired that the invalid, James Maybrick, was given Valentine's Meat Juice when he could not take any solid food, and that arsenic was discovered in food preparations in the house, but notably in glycerine used by the patient. In this connection an extraordinary fact has recently come to our knowledge, brought to light by the analysis we published of Valentine's Meat Juice. Mr. Bird, head of the wholesale chemical works of Messrs. A. Bird & Sons, Birmingham, recently informed us that a short time prior to the death of James Maybrick, a lot of glycerine was offered to his firm by a German manufacturer. As nothing is purchased for Messrs. Bird & Sons' business without being analysed by an analyst in the employ of the firm, the sample of glycerine was sent to the laboratory, where, to Mr. Bird's surprise it was found to contain a large proportion of arsenic, and of course was rejected. It was more than a probability that a large part of the glycerine rejected by Mr. Bird was sold in Birmingham, Manchester, Liverpool and other large towns in the Midlands to chemists, who would neither have the time nor the appliances necessary to test the glycerine, and who, in fact, would not think of testing it, but would purchase it in good faith as pure. It is, to say the least, an extraordinary coincidence that a little time before James Maybrick's death, glycerine containing arsenic should have been on sale in the district, and that fact, allied to the notorious one that James Maybrick was himself a confirmed arsenic eater, may well raise a doubt as to whether, after all, there may not be something in the allegation so persistently made, that Mrs. Maybrick is a victim of a miscarriage of justice. It is, however, beyond doubt the fact, that in prescribing Valentine's Meat Juice for their patient, his physicians believed they were administering a valuable preparation, rich in nutrient and stimulant properties. From our examination of the preparation we incline rather to the belief that James Maybrick's death was just as likely the result of starvation as of poisoning, for Dr. Paul's analysis showed that the amount of arsenic discovered in the body, was not sufficient to poison a child. Meat extracts, as worthless as that of Valentine's, are nevertheless being recommended and prescribed every day for the sick, and that being the case we feel it a duty we owe to our readers to comply with their demands for a further series of Meat Extract analyses. In the present article we shall deal with four typical preparations, viz., Liebig's Extract, Brand's Essence of Beef, Bovril, and Valentine's Meat Juice, and along with the comparative analyses we shall give comparative prices, to the end that our readers may the better judge of the actual and relative value of each preparation. The samples analysed were in all instances purchased independently for analysis from chemists establishments in the Metropolis, and our own results have been compared with a separate series of

analyses made by an analyst of European reputation, thus excluding any possibility of error. Our own analyses gave the following results:—

	Brand's Essence of Beef. (3 ounces equals 1/2)	Liebig's Extract of Meat.	Valen- tine's Meat Juice.	Bovril, for Invalids.
Quantity .. equals	2 ounces	2 ounces	2 ounces	2 ounces
Cost (Store price) .. at	9½d.	1/2½	3/-	11d.
	Per cent.	Per cent.	Per cent.	Per cent.
Water	91.23	16.87	55.24	16.46
Ether Extract	0.18	3.04	4.80	2.72
Albumenoids and Pep- tone with a small quantity of Gelatine (flesh formers) ..	3.79	9.55	2.48	23.87
Creatin and Meat-Ex- tractives (almost non-nutritious) ..	3.96	47.32	18.27	31.94
Mineral matters, Salts of Flesh, Phosphates, &c.	0.84	22.54	11.13	19.48
Non-nitrogenous Ex- tractives	None.	0.68	8.08	5.53
	100.00	100.00	100.00	100.00

To deal with these preparations in the order in which they present themselves in the above analyses, we have first to consider
BRAND'S ESSENCE OF BEEF.

The vendors declare this essence to consist solely of the finest meat without the addition of water or any other substances. The preparation, it will be noted, is shown in the analysis here given to contain no less than 91.23 per cent. of water, i.e., 74.36 per cent. more water than Liebig's Extract, 74.77 per cent. more water than Bovril contains, and 35.99 per cent. more than Valentine's Meat Juice. The proportion of water naturally present in beef is from 43 per cent., found in the flank, to 60 per cent. in the round of beef. We confess, therefore, to an inability to understand how 91.23 per cent. can be present in Brand's Essence of Beef, and reconcile its presence with their statement in their price list that "the essence consists solely of the finest meat *without* the addition of water."

Our Consulting Analyst's opinion is that "the preparation is an exceeding aqueous meat jelly, and that it has but 3.79 per cent. of nourishment, and 3.96 per cent. of stimulant nitrogenous matters; that as a food and stimulant it is worth very little indeed, although its extremely pleasant taste may commend it to invalids." The amount of albuminoids present on analysis proved to only amount to 1.25 per cent. Liebig's Extract of Meat contained nearly the same amount of albuminoids, viz.: 1.35 per cent., being in this respect very little better than Brand's Essence of Beef, although the cost is 1s.1½d., whilst Brand's is but 9½d. Valentine's Meat Juice contained only 0.93 per cent. of albuminoids, and cost 3s., whilst Bovril had 9.14 per cent. of albuminoids, and cost 11d. Roughly calculated, the nutritive albuminoidal value of Bovril was seven and a quarter times that of Brand's Essence of Beef, and six and three-quarter times the nutritive albuminoidal value of Liebig's Extract. Compared with Valentine's, the nutritive albuminoidal value of Bovril was, roughly speaking, ten times that of Valentine's Meat Juice. Calculated on the basis of Brand's Essence of Beef, as to albumen values, if Brand's essence of Beef was worth 9½d., Bovril was worth 5s.3d.; and on the albumen value of Liebig's, if Liebig's Extract of Meat was worth 1s.1½d., Bovril was worth 8s.2d., instead of the 11d. we paid for it. It would be interesting, in the light of these facts to know on what basis the prices of proprietary food articles are fixed. for if we carry the calculation further, and take Valentine's Meat Juice as a price basis, if Valentine's Meat Juice was worth 3s., Bovril was worth 30s., instead of 11d. charged. As to the value of Brand's Essence of Beef as a food, an eminent scientist who is a Doctor of Philosophy, a Fellow of the Royal Society and of the Chemical Society, reports: "Its value as a food is very small, and it possesses but little stimulating action." Thus corroborating our own results.

The second preparation analysed is the much used
LIEBIG'S EXTRACT OF BEEF.

We referred in our last article to the startling experiments of a French scientist who disputed Justus Von Liebig's conclusions. Later experiments in this direction were also as curiously conclusive. Extract of beef was given to some animals, and to others the detritus—from which the nutrient properties were by the Liebig process, supposed to have been entirely extracted—and present in the extract of meat. The animals fed upon the extract died sooner than those to whom the detritus alone was given. These extracts have an enormous sale, and are recom-

mended highly for invalids, who are told "they should take beef tea made from this extract, as it is the purest, cheapest, and best." Upon the question of purity we have no fault whatever to find, the examination chemically and physically being in that respect entirely satisfactory, but as to cheapness and food value our analysis in no way coincides with the assertions made in favour of the Liebig extracts of beef. In point of fact the albuminoids are almost infinitesimal, being as we have previously shown only 1.35 per cent., the process of manufacture of extracts of this character being one that does not admit of a high proportion of albuminoids in the extract. The nutritive value is therefore very slight, the bulk of the nutritious substances found in the flesh from which the extract is prepared being converted into waste metabolites, kreatinin, etc. Liebig's Meat Extracts are therefore accurately described in the report of the Ph.D., F.R.S., and F.C.S., as being valuable only as stimulants, or as additions to a vegetable diet, but are not strictly speaking foods."

This opinion finds corroboration in that of Mr. A. H. Church, F.R.S., M.A. Oxon., who in "Food," pp. 167, says:—"Such a preparation does not contain more than a very small proportion of the true nutrients of meat, but is little more than a food adjunct. Thus it is that Liebig's Extract of Meat cannot be regarded as a food, though its use as a flavourer and as a medicine is not unimportant; it also furnishes some of the minor food constituents." Where, therefore, real food is required for the invalid or the convalescent, Liebig's is not a preparation that can be recommended. It would be untrue, however, to deny that it possesses a certain amount of nutriment in the form of peptones, but the greater part of the true nutrients of the meat from which it is prepared is, by the process of manufacture, destroyed, and the bulk of the preparation is Creatin, Meat Extractives, and Water, non-nutritious and forming 64.19 per cent. of the whole. Compared with Brand's Essence of Beef, Liebig's Extract of Meat is, as has been shown, nearly identical in the value of the albuminoids, but the peptone in Liebig's Extract of Meat is 8.20 per cent., as compared with 2.54 per cent. peptone in Brand's Essence of Beef; 1.55 per cent. in Valentine's Meat Juice, and 14.73 per cent. of peptone present in Bovril. The peptone value of the four preparations give roughly the following results, taking Brand's Essence of Meat as the basis for the first calculation: Brand's Essence, containing 2.54 per cent. of peptones, sells at 9½d.; Liebig having 8.20 per cent. peptones, sells at 1s.2½d.; Bovril, containing 14.73 per cent. of peptones, costs 11d.; Valentine's Meat Juice, having 1.55 per cent., costs 3s. If Brand's therefore be worth 9½d. the peptone value of Valentine's Meat Juice is less than 6d. Liebig's peptones value is 2s. 6d., and Bovril worth 4s. 5½d.

The albumen value, however, is in every way the best test of a meat extract, inasmuch as the system requires a due exercise of the digestive powers, which foods rich in peptone but poor in albumen do not give; what is actually required for the purpose of being converted into flesh in the human system are the albumen and fibrin as presented in an ordinary beef steak. The results of the comparative analyses of food and monetary values we must candidly say surprised ourselves as much as we believe they will surprise our readers. We are pleased to find that none of the samples analysed contained preservatives.

Valentine's preparation, more than any other of those analysed, afforded matter for reflection. Konig's published analyses show year by year a gradual decline in the albuminoidal value of that preparation which contains to-day 0.93 per cent. as against over 6 per cent. ten years ago, a fact full of significance, and showing the necessity for regular and searching analyses of proprietary food preparations.

To be continued.

ENCOURAGING ENGLISH TRADE!!

The Rev. A. Boyle, at a meeting of the Croydon Guardians, advocated the use of Danish butter, and a Mr. Shirley supported him, and suggested that tenders should be got for it. We commented a few weeks ago on the action of Croydon magistrates in encouraging adulteration and fraud, and would have thought the awful example of Hobbs and Jabez Spencer Balfour would have served as a lesson to Croydon worthies. Nothing stupid comes amiss to Croydon, not even the spectacle of Englishmen advocating the use of foreign produce, rather than English; but with Government departments, showing the shameful examples of preferring German bayonets that cork-screw, and German pencils, etc., to English, we do not wonder at it. The action of the Croydon Reverend and his brother guardian are only a part of the "self-abasement that paves the way to villain bonds and despots' sway." England is fast becoming the happy hunting ground for every foreign *exploiteur*, thanks to persons like these Croydon guardians who do not consider that "evil is wrought by want of thought, as well as by want of heart." But what has English butter done that it should thus be boycotted?

DISEASE AND DISINFECTANTS.—III.

IN the second article of this series we published the results of using a spurious disinfectant in Derbyshire. It was sold by the vendors as a Carbolic Disinfectant powder, and certified by a bogus analyst to contain 15·5 per cent. of carbolic acid. On analysis we found it to contain no carbolic acid whatever. It had a very faint trace of tar oil, and was, to speak plainly, a murderous swindle. Mark, however, the state of our laws with respect to frauds of this character—which are surely the most dangerous practiced on the public. After much trouble, and aided by many earnest subscribers, we found the makers of the swindling Victoria Carbolic Disinfectant Powder to be resident in an East London parish. With characteristic promptitude the medical officer of health for the parish, on the facts being brought to his knowledge, placed them before the Health Committee, but only to learn that the Health Committee were powerless, inasmuch as disinfectants do not come within the provisions of the Food and Drugs Acts. They could only recommend the vestry clerk to place the matter before the Board of Trade with a view to proceedings being taken under the Merchandise Marks Acts. Those who know anything of the maddening circumlocution of government offices do not need that we should point out to them that such a course means that nothing can be done. And yet what are the facts? The use of the Victoria Carbolic swindling disinfectant caused in the one district of South Wingfield, Derbyshire, fifty cases of typhoid and five deaths. In some countries the rascals guilty of crimes of this nature would have short shrift, in England they pursue their infamous business without interruption. Yet their offence is really one not short of murder, inasmuch as the first typhoid case at Wingfield occurred in the house of a family named Bramley, residing near the top of the hill, and, as reported by Dr. Barwise, medical officer of health to the County Council, the typhoid excreta were mixed with the bogus Victoria Carbolic Disinfectant Powder and buried, and the typhoid germs, unaffected by the so-called disinfectant, were carried half a mile in the subsoil water and contaminated wells used by families further down the hill, giving rise to fifty cases of typhoid fever and five deaths. By the time the Board of Trade make up their minds to stir in the matter, the rascally vendors will have changed their address and the title of their swindle; their fraudulent disinfectant will be re-christened and sold from a different part of the country. In the absence therefore of any real powers to deal with abuses of this kind, we make no apology for giving our readers some more facts respecting disinfectants. "The angel of death is in the air," and the beating of the wings of the cholera fiend can be heard as near to us as the French coast. To protect our people from that terrible scourge, England should, in a sanitary sense, be adequately equipped. We would like to see a condition of things where the filter and the disinfectant would be as unknown as they were unneeded, but we have to pay for the apathy and want of knowledge of our ancestors, and of lower grades in civilisation, and being, as we now are, menaced with the cholera scourge, it is well that we should know just how we stand. Undoubtedly our most vulnerable line of defence is in our ports, and of our ports one of the most important is Hull. We commented some weeks ago upon the inadequate remuneration made to the Hull public analyst, and to the fact that of some of the most important articles of food no samples are taken from year's end to year's end in that town. As we have no personal knowledge of the public analyst, medical officer of health, surveyor, or in point of fact of any person connected with the administration of Hull, either in food or sanitation, we must, in justice to the authorities, point out that our facts are not gleaned from Hull officials, but are from enquiries made independently of any of the Corporation officials. We found that in Hull, one of the most important ports, be it noted, in the United Kingdom, and the most closely connected with the cholera affected Continental ports, the Corporation purchases a carbolic powder alleged to contain 10 per cent. of carbolic acid, but which on analysis by an expert of European repute is found to contain but 8 per cent., of so-called active principles, of which only $\frac{2}{3}$ ths or less is phenol. The Hull authorities are, no doubt, well-meaning, but in this, as in other important matters, they show how "evil is wrought by want of thought, as well as want of heart." It may be that, like scores of other authorities, they consider the analysis of disinfectants a work of supererogation, and have given no thought to the possible result of such carelessness. We have made this case of Hull public that the Hull city fathers may see what they invite, and that other Corporations may profit by the lesson. We instanced the facts of Derbyshire and its bogus carbolic powder. It is no wild supposition to imagine cholera striking Hull, and the cholera excreta being buried with the carbolic powder thus analysed. But what would be its result? We have no hesitation in saying it would be little better than that of the Derbyshire case. If members of town councils, vestries, &c., could but be brought to recognise that a medical officer or surveyor is not an analyst, and that the qualifications and

training have nothing in common, cases like this of Hull and Derbyshire would be unknown; but they do not, and the process of enlightenment on this most important of sanitary questions is a slow one. Price rules everything, and for the saving of an analyst's fee of a guinea or so, the community is victimised by well-nigh worthless disinfectants as in Hull, or absolute murderous frauds as sold in Derbyshire. If these cases of Hull and South Wingfield were isolated instances, grave as is the danger, we would have the attendant consolation that it would be limited, but our inquiries show us that the instances are not rare; that in point of fact more swindling, rubbishy disinfectants are purchased by local authorities and the general public than there are purchases made of genuine ones. The London Port sanitary authority, for example, has been active in taking precautions against the introduction of cholera, but despite the best of arrangements cholera may baffle their vigilance. The parish of Mile End closely adjoins the London Docks, and is a parish where the danger of cholera is not an unlikely one. In this important vestry we found the Sanitary Committee purchasing, some time since at 3/6 per gallon, a fancifully named substance, which was nothing more or less than *dirty water*. Leaving out of consideration the fraud upon the Mile End ratepayers—a matter surely serious enough in itself—there is the grave danger to public health. Those using the dirty water do not doubt its efficacy, but rather rely upon its powers as a disinfectant. It is terrible to contemplate what would be the consequences of a cholera outbreak in the Mile End parish, were rubbish of this class to be relied on by the sanitary department for disinfecting purposes. The whole question, however, of disinfectants and disinfecting is one upon which little is known, and as it is one which for many reasons affecting the public welfare is now prominently before the attention of the country, we will leave for a moment these records of frauds in disinfectants, and pursuing our enquiries a stage further, deal not only with impostures, but with what is a disinfectant and what is disinfecting. With a threatened epidemic of cholera right before our eyes, this is no time to quibble about terms, and to waste our best energies in formulating mere scientific definitions as to what is a disinfectant. It is enough for the present, and, indeed, for all time, if by the term disinfectant it is intended to indicate an agent which will prevent the spread of infectious or contagious diseases. A contemporary has suggested that chemical experts might measure and compare the capability of the chemical action of the various disinfectants quite apart from their actual composition or percentages of ingredients, but unfortunately that is scarcely practicable on account of the divergent natures of the many chemical reactions which are involved, and more particularly because all parties are not agreed as to what constitutes the essential substance which is to form the subject of the chemical change. The truth is, the science of disinfection presents many phases, and hence there are many varieties of disinfectants. That which prevents the spread of disease is to all intents and purposes just as much disinfectant in character as that which destroys the virus which may be already in existence locally. Prevention is literally better than cure. The prevention and the destruction can both be effected in diverse ways: that fact is known, although as previously stated, scientists are not yet absolutely in accord as to what is to be prevented or destroyed. The preponderance of evidence supports the view that epidemic diseases are caused by the dissemination of toxic chemical poisons which are elaborated by the growth of microbes (micro-organisms) in a suitable soil (medium or pabulum). If, therefore, we can kill these microbes, or prevent the elaboration of the poisons which they produce, or which, being already formed, we can chemically destroy them, we have in such agents, disinfectants, which are available for popular employment in preventing the spread of such disorders. Some contend that the access of these microbes *per se* to the human system constitutes the act of infection, but that is not, at least, the whole truth, for, in all probability, the various natural orders of micro-organisms are more or less ubiquitous, although, no doubt, larger colonies can be bred locally where circumstances are favourable to their reproduction, than are to be found ordinarily. Being, more or less ubiquitous, how is it, if such view be correct, that any of us escape death by their evil agency? Moreover, there is no reasonable explanation of such a contention. It is far more reasonable to assume that in the human body they are capable of producing the same or similar chemical (toxic) poisons that we know by experimental observation they do produce in the laboratory in suitable cultivations. The artificial introduction of these poisons into the human body is sufficient to produce both illness and death. All these considerations support our view that disinfection is a many-sided subject, and can be realised in as many ways. Moreover, if we *must* kill the microbes in order to prevent disease, what a stupendous task is set humanity! On the one hand, we have to exterminate a natural order of creation which we shall see presently is a necessary order too, and on the other hand we have to kill them only too frequently in the human body, where they cannot be reached except by means which are more likely to kill the host

instead. If, therefore, our available disinfectants possessed the one property only of being germicidal, we should, as a species, rapidly succumb to the attacks of these minute forms of life. We fall back upon ground of a non-contentious character in the hope of finding a solution of all these difficulties.

Microbes can only breed in a soil that is suited to them, and that must be of an organic nature. It is their natural function to breed upon dead animal and vegetable matters, thereby reproducing their kind, and at the same time decomposing these substances into a large variety of products, many of which (ptomaines) are exceedingly poisonous. Carried a stage further, these intermediate products are ultimately resolved by a continuation of the process into carbonic acid (anhydride), water and nitrogen. That is to say, microbes as a class perform the necessary work of decomposing organic matter into certain natural substances, which are again required in nature to support other and higher forms of organisms. It is a cycle in the order of creation and reproduction. Annihilate microbes, and animal and vegetable products become eternal, unless, indeed, it were possible to erect huge and multifarious furnaces over the face of the earth in order to destroy by fire all such accumulations. We cannot annihilate an order of creation, nor is it desirable to prevent the useful work which they perform. That which we have to aim at is to prevent the development of such microbic forms of life when and where they are not wanted.

There are then many ways in which the act of disinfection can be secured, and there are a legion of substances which may be employed for the purpose. Some substances, as for example, carbolic acid, tannic acid, alum, etc., act by forming combinations with organic substances, which would otherwise become pabulum to micro-organisms, and thus they act as so-called antiseptics. Others, again, act more particularly as germicides, that is to say, they destroy *locally* the micro-organisms, which would otherwise have the power of initiating processes, which would result in the formation of septic poisons. Again, there is a class of chemical substances, which act in a perfectly distinct manner, viz.:—by oxidation; that is to say, such substances are capable of breaking up organic matters by the act of oxidation, into more or less ultimate products, and also of changing, by the act of oxidation already-formed toxic poisons. Peroxide of hydrogen, and the permanganates (of which Condy's Fluid is illustrative) may be cited as illustrations of this class of substances. Many micro-organisms are dependent for their life upon the supply of oxygen, hence if they be placed in contact with substances which remove the oxygen they die in consequence; other classes are killed by oxygen, hence if they are brought into contact with oxygen, or with substances which supply it freely, they also die in consequence. These and other varieties of chemical action affecting microbes, and the chemical processes which they are capable of initiating, afford ample evidence that the subject of disinfection and disinfectants cannot be regarded from any narrow standpoint, and must not be dealt with in any arbitrary or summary fashion. It has become a fashion to claim every power for carbolic acid. It cannot be denied that carbolic acid is a powerful antiseptic, and to some germs, no doubt, it acts as a powerful germicide, but in other cases it is almost valueless as a germicide, while as an antiseptic it is, if anything, too powerful. We do not want, as we have seen, to indefinitely lock up organic matter in a form that will prevent its ultimate change into final products. We only want to temporarily arrest in, and around our dwellings, the production of such substances as have been above described. Moreover, carbolic acid, like many other disinfectants, is characterised by the feature of being extremely poisonous. Hundreds of lives have been sacrificed by the ignorant or intentional use of carbolic acid, and save in the hands of those knowing its properties it is likely to prove dangerous for popular use.

Again, permanganate substances, while of great service for many purposes, are open to the objection that they impart a ruinous stain to clothing, linen, and furniture, and they cannot be employed with impunity in household disinfection. Other substances, like sulphurous anhydride and chlorine, are also open to objection for household use, because, apart from the fact that they are most offensive in themselves, they are powerful bleaching agents, and cause therefore much damage to curtains, carpets, pictures, &c. Of disinfectants free from these objections, the Sanitas preparations more closely approach the ideal disinfecting requirements than any we have yet tested. We find that they are not poisonous; they do not stain, and they act not only as antiseptics and oxydising agents, but also as powerful germicides, and give off oxygen, or its chemical equivalent (peroxide of hydrogen), in an active form, instead of soaking it up from the air as do many disinfectant preparations of the coal tar class. Our opinions are supported by Dr. A. B. Griffiths, the well-known bacteriologist, who, we understand, in a recent investigation, has found that the "Sanitas" disinfectants, exhibit the property of destroying the whole of the so-called ptomaines, that is, a class of poisons which are produced by germs when cultivated in suitable soil, and although they are not so powerfully antiseptic, perhaps, as

carbolic acid, that is if anything, as we have shown, an advantage, besides which they have been proved beyond all question to act as germicides. We do not need to remind our readers that disinfection is a serious duty. The series of articles we have already published on the question, and the analyses given of well-known preparations, show its importance and how dangerous is the use of any but reliable preparations. An examination of so-called disinfectants, purchased at numerous shops in London, showed that so-called carbolic preparations had very little, if any, carbolic acid, that many styled Pine and Eucalyptus preparations were the most worthless of impostures, and almost devoid of merit. Instances have come to our knowledge in which a solution sold under a fanciful name proved upon analysis to contain very little more than a mere trace of sulphuric acid, although it was declared to be a powerful disinfectant. The dirty water sold to the Mile End Vestry disguises itself under a name that would lead one to the belief that it concentrated the invigorating breezes to be obtained only at the sea-side. Our own researches receive ample corroboration from other independent enquiries. In the parish of St. Luke's, London, 75 per cent. of the disinfectants sold to the public were adulterated, and many of them worthless rubbish. It is an ill and a dangerous policy therefore, that actuates so many local authorities. A few pounds extra paid for analysis to public analysts of unquestioned capacity would be well expended, and save murders by carelessness, such as those at South Wingfield, and dangerous frauds upon vestries and ratepayers like those instanced at Hull and Mile End, and which, had we space, we could supplement by a score more cases. But to effectually cope with the evils instanced, we require not only a ministry of Public Health, but a state endowed society for scientific research, and he who would give these boons, would be a true benefactor to his country, and would earn the everlasting gratitude of sanitarians everywhere.

THE ALUM IN BAKING POWDER APPEAL.

GARBLED REPORTS.

A WARNING TO GROCERS.

Side by side we place extracts from a report that appeared in a so-called trade paper, with the real report of this important case, and invite grocers to contrast the garbled one in the trade paper, which we can only consider as being written to mislead retailers as to the action of alum in baking powder, its danger as an adulteration, and the grave risks retailers run in selling any baking powder that contains alum.

The Grocer reports:—

Dr. William Morgan, the public analyst, said by following out the instructions printed on the packet a 4-lb. loaf would contain 360 grains of baking powder, and four-tenths of that would be alum. When the bread was eaten the hydrate of alumina was dissolved by the gastric juices of the stomach, and the result was that chloral of aluminium was formed. He tested this by he and his son taking a full meal on Sunday last.

The accurate report.

Dr. W. Morgan, of Swansea, the county analyst, said by following out the instructions printed on the packet, a 4 lb. loaf would contain 360 grains of baking powder, and four-tenths of that would be alum. The reaction between potash, alum, and bicarbonate of soda is the production of hydrate of alumina, sulphate of soda, sulphate of potash, carbonic acid, and water. The hydrate of alumina might be taken as being 1-6th of the alum. When the bread was eaten the hydrate of alumina was dissolved by the gastric juices of the stomach, and the result was that chloride of aluminium was formed. He tested this by he and his son taking a full meal on Sunday. His son took with his food hydrate of alumina produced from a packet of the baking powder in question. Witness took his meal without the alumina. Under the supervision of Dr. Griffiths they both took a mustard emetic and vomited. To his own vomit he added alumina hydrate, but to his son's he did not. He subjected the vomited matters in both cases to dialysis through vegetable parchment, and proved the presence of chloride of aluminium in the dialysate, thus demonstrating that hydrate of alumina was actually dissolved by gastric juice. He repeated these experiments thrice.

Mr. Otto Hehner, a past president of the Society of Analysts, and analyst for several counties, also agreed with Dr. Morgan on the result of experiments that hydrate of alumina was readily soluble in the gastric juice.

Mr. Otto Hehner, a past president of the Society of Analysts, and analyst for several counties and boroughs, said for twenty years he had made the analysis of food a special study. He agreed with Dr. Morgan, on the result of experiments, that hydrate of alumina was readily soluble in the gastric juice. He had experimented upon loaves of bread made with the identical baking powder that was the subject of the prosecution, and upon other loaves containing alum. He found that in both cases the alumina could be readily extracted with dilute hydrochloric acid of half the strength of normal gastric juice, viz., 0.1 per cent. In his opinion there was no difference between bread made with alumed baking powder and such as was made with alum only, the latter being universally acknowledged as unfit for food. Its introduction into the stomach would be very bad for one indeed.

Professor Thompson (Professor of Chemistry at Cardiff University College), Professor Edmund Dunston (of Oxford), Dr. Lauder Brunton, and other medical gentlemen were called in support of the prosecution, and stated that the powder was injurious to health when used in making bread. On Thursday the appeal was resumed, the case for the prosecution being closed at midday. Witnesses were then called for the defence, and the case was adjourned again, when amongst other eminent authorities to be called to show that the constituents of the powder are harmless are Dr. Richardson, London, and several people who have used the powder for many years, and have not suffered the slightest ill-effect on their health.

Professor Thomson, professor of chemistry at Cardiff University College, gave it as his opinion that hydrate of alumina was soluble in the stomach. Professor W. R. Dunston, M.A., Oxford, and lecturer at St. Thomas's Hospital, London, stated that he had fed a man and animals upon bread made with the baking powder in question, and had detected alumina in their urine, proving that some soluble salt of alumina had gone into the circulation.

Dr. Thomas Lauder Brunton, F.R.S., the eminent physician, and author of several text books on the digestion, etc., said it was a fact that the action of alum caused gastric disturbances. He had heard the experiments Dr. Morgan performed, and these seemed to him to afford conclusive evidence that the hydrate in the stomach was changed into chloride, the cause of the change being the hydrochloric acid of the gastric juice. The effects of chloride of aluminium would be the same as of alum qualitatively. Whether they would be the same quantitatively or not he was unable to say. In his opinion the presence of chloride of aluminium would be injurious.

Mr. Francis Sutton, Fellow of Institute of Chemistry, and public analyst to the county of Norfolk, and the town of Great Yarmouth, was cross-examined by Mr. David Lewis, with reference to the evidence given by him on Thursday. In reply to the learned counsel witness stated that twenty years ago he was consulted by a manufacturer, who wished to ascertain whether a powder containing alum was injurious or not. Having tried it on himself, his children, and a dog and cat, he gave a testimonial, which was printed on the back of the packets afterwards. With regard to experiments made on sheep, if there had been soluble aluminium it would have diarrised through and been found in portion of the bladder.

Mr. Francis Sutton, public analyst for Norfolk, stated that hydrate of alumina was according to his experiments quite insoluble in gastric juice. He also had made experiments upon the vomited matter of a man who had taken a pound of bread made with the alumed baking powder, and had not been able to obtain any chloride of aluminium by dialysis.

In cross-examination he said that he had used instead of vegetable parchment, for his experiments a sheep's bladder, and he was severely interrogated upon a fact that should have been well known to him that animal membranes could be tanned with soluble alumina salts and combined with the alumina, so that it would have been impossible to find aluminium chloride in the dialysate. Mr. Sutton produced a tube containing a small quantity of alumina as representing the quantity of aluminium hydrate, which would be present in an ordinary loaf of bread made with the baking powder, but he had to

admit that the substance which he produced was not alumina hydrate at all.

Dr. A.P. Luff, analyst to Home Office, who next gave evidence for the appellant, expressed the opinion that hydrate of alumina and alum were absolutely different substances. In his opinion the powder in question was not injurious. He had used it in his household for the past two months, and had experienced no harmful symptoms. In the course of further examination witness declared that the experiment conducted by Dr. Morgan was utterly valueless, because he did not use the hydrate of alum in the same condition as it existed in bread or cakes made with the alum powder. He gave it as his opinion that hydrate of alumina was not injurious to the human body because it was not soluble. In the case of bread taken into the stomach, the hydrate of alumina did not change its character in any degree during its passage through the body. He had never known or heard of a patient suffering from the effects of baking-powder taken in bread. The reason alumed baking-powder was used was, he conceived, firstly because it was so much slower in generating carbonic gas than tartaric acid, and poor people who had not always the appliances ready for quick baking found it answer their purpose better; and, secondly, weight for weight it was cheaper than tartaric acid.

Dr. Arthur Pearson Luff, one of the analysts to the Home Office, stated that he had also made experiments which convinced him of the insolubility of alumina-hydrate in gastric juice. He alleged that the amount of free hydrochloric acid in gastric juice was not 0.2 per cent., but 0.02 per cent., according to the newest researches as given in Haliburton's work on physiology. but Dr. Luff on being cross-examined, had to admit that the sole experiment that gave 0.02 of hydrochloric acid in gastric juice, was made upon a patient having a fistula, and that the result was declared by Haliburton himself be abnormal, whilst 0.2 per cent. was given by him as the proper amount. Further it was elicited that the sole figure upon which Dr. Luff relied was not new but had been published in 1852. It further came out that the alumina hydrate which Dr. Luff had used in his experiments had been heated to at least 150 degrees centigrade, and Dr. Luff had to admit that it was probably not alumina hydrate at all, but a substance which he called an oxy-hydrate. Dr. Luff had taken 5 grains of this oxy-hydrate, and treated it with 40 cubic centimetres of dilute acid containing 0.02 per cent. of hydrochloric acid, but it was shown that in order to dissolve these 5 grains not 40 cubic centimetres, but 2,200 centimetres ought to have been taken.

Our readers will see clearly by comparing the above how dangerous and delusive such a garbled report as that in the *Grocer* is, and for our part we wonder how much longer retailers will consent to be thus grossly deceived. What earthly interest, for example, has the retailer in bolstering up the alum in baking powder adulteration. We venture to say, none whatever; for the all sufficient reason that the adulterating manufacturer is the worst enemy of the honest retailer. Yet what do we see the retailer doing? Forgetful of the fact that the manufacturer has caused him a prosecution, a fine, loss of time, and secured him opprobrium from the public with its attendant loss of trade, he permits himself to be used as a shield behind which the adulterating manufacturer, who, be it noted, takes *exceedingly great care that his own name is not made public*, fights an appeal. It is high time the grocers, as a body, protested against the intolerable wrong done to their trade, and saw into what a morass this advice of so-called trade journals is leading them. It is by garbled reports, hushed up cases and the like, that such traders as Lipton sell American produce as English, and that cut-throat competition has made the grocery trade one of the hardest and worst paid in England. These are facts retailers should ponder over, and misleading garbled reports like the one above, culled from the *Grocer*, furnish what should be an object lesson to honest traders. When it is noted further that the use of alum in baking powder causes a loss of at least 10 per cent. to the purchaser, by reason of the fact that at least that proportion of the bread made with alumed baking powder passes through the system undigested, and affords no nutriment to the person eating such bread, it will be seen that in addition to it being unhealthy and provocative of indigestion, it is a positive fraud upon the public. We would also invite the attention of grocers as well as the public to the fact that alum in baking powder has received emphatic condemnation from the *Lancet* and the *British Medical Journal*. Grocers therefore who value their reputations and do not wish to be either prosecuted or to injure their customers, should refuse to sell, or in any way deal in any baking powder that contains alum.

MARGARINE ACT PROSECUTION.

At Dublin on the 15th inst., Thos. McDonnell, 66 and 67, Upper Dorset-street, was fined £5 for exposing for sale margarine labelled as finest Wexford butter.

IMPORTANT LARD PROSECUTIONS AT LEEDS.

CONVICTION AND NOTICE OF APPEAL.—A WARNING TO GROCERS.

At the Leeds Police Court on April 14th, before Mr. Bruce, stipendiary magistrate, William Cussons, Limited, provision dealers, Marsh-lane, Leeds, were summoned for having sold to William Gill, on the 18th of February, one pound of lard, which was not of the quality and substance demanded by the purchaser.

Mr. C. C. Jolliffe, deputy town clerk, appeared to prosecute; the defendant firm was represented by Mr. Woodhouse, solicitor, Hull.

Mr. Woodhouse took an objection to the proceedings at the outset on the ground that lard being a perishable article, the summons should have been taken out within twenty-eight days of the offence.

Mr. Jolliffe observed that lard was not a perishable article and might be kept for years. He could call the inspector who had had fourteen years experience.

Mr. Bruce said he would first hear the evidence.

William Gill said he was in the employ of the Leeds Corporation. He went into the defendants' shop on February 18th, and bought a pound of lard for which he paid sixpence. The boy who served him could hear what he asked for. There was no label on the bucket from which he was served. Inspector Walker, of the Sanitary Department of the Corporation, then came in, and witness handed him the purchase.

By Mr. Woodhouse: Did not ask for "a pound of sixpenny butter." He did see a label, but it was on the floor. It was labelled "Shortening." The manager said it should have been on the bucket, but owing to their being busy (it being Saturday night) it had dropped off, and they had not noticed it.

He did ask for "a pound of sixpenny lard." When the inspector received the lard he told the manager it was for the purpose of analysis. The lard was wrapped in white paper. There was other paper underneath with the word "Shortening" printed on. He heard the manager say "he was very sorry, but he hoped there would be nothing more said about it."

Mr. Walker, inspector of food and drugs to the Leeds Corporation, described how he received the lard from the last witness, and dividing it into three portions offered one to the manager, which, however, the latter refused, saying they had plenty. The manager asked the boy if he had used the "shortening" paper, and he said "Yes." Witness did not know what was meant by "shortening." The manager showed witness a board containing the label, "Real Lard Compound." On March 29th witness saw Mr. Lyth at Hull, but he said he had heard nothing of the matter. Mr. Cussons he also saw at Hull. He said it was an inferior class of trade that they did at Leeds to what they had at Hull. Witness identified the certificate produced as that of the city analyst showing the lard to contain 60 per cent. of foreign fat. With fourteen years experience he felt competent to say lard was not a perishable article. He had kept lard for two years, and at the end of that period it was quite sweet and good.

Mr. Woodhouse: You had explained to you that "shortening" meant a "lard compound." Yes.

Then you didn't leave the premises without knowing that you had got an inferior article? Yes, but that was after the purchase.

Mr. Woodhouse, for the defence, still contended it had not been shown that lard was other than a perishable article. Then, again, he contended it had been abundantly proved that the purchaser got exactly what he demanded.

The Stipendiary: No he didn't. He asked for lard.

Mr. Woodhouse: He asked for sixpenny lard—not sixpenny pure lard.

The Stipendiary: Lard is pure lard.

Evidence was thereupon called for the defence.

Louis Tomlinson, a boy, said he was in the employ of the defendants, and he was serving at the counter when Inspector Walker's man came in and asked for a pound of 6d. lard. Mr. Woodhouse: Did you serve him? Witness: Yes. Where did you get it from? Out of a bucket. What kind of a paper did you put it in? "Shortening" was printed on it to show it was not pure lard. Is that the kind of paper you would have put any other sort of lard in? No. If you had sold him lard at 7½d., what kind of paper would you have used? Plain white paper. What did he do when he got the lard? He left the shop. And the inspector came in? Yes.

Mr. Bruce, to the defendant's manager: Is there any such thing as "shortening" known in the trade? Witness: I cannot say, sir. You are a provision dealer? Yes.

Mr. Bruce: In this case the plaintiff by his agent went into this shop and asked for lard. The boy says that what was asked for was "6d. lard." This was handed over, and was found to contain 60 per cent. of foreign fat. It is said that it was wrapped in a paper on which was the word "shortening." That seems to be only a name these people give to impure lard. There was nothing calling the attention of this man to the word "shortening." Lard is used for "shortening." I have no doubt in this case that an offence was committed; the only question is as to the penalty I ought to impose. I shall inflict a penalty of £5 and costs. Mr. Woodhouse: The defendants desire to appeal. First of all there is the question I took, as to whether the summons is not bad. That would be a matter for a special case. Mr. Bruce: I rule that lard is not a perishable article. I shall not state a case. Mr. Woodhouse: The defendants will appeal to Quarter Sessions on the facts. We understand that the appeal will be heard at the next Quarter Sessions for the City of Leeds.

At the same court John Thomas Allen, grocer, of 216, Kirkstall-road, Leeds, was summoned under the same Act for selling lard which was not of the nature and quality demanded by the purchaser. Mr. Jolliffe, the deputy city clerk, again appeared to prosecute, and Mr. Peckover represented the defendant.

Mr. Gill said that on the instructions of Inspector Walker he went to the defendant's shop on February 18th, and purchased a pound of lard. There were two lots of lard together in a cupboard. One was marked "Guaranteed pure lard" and the other "Sixpence." He was supplied with the latter. It was wrapped in white paper, and nothing was said about its quality.

In reply to Mr. Peckover witness said he did not see any other label on the sixpenny lard except the price ticket. When he went in he asked for "a pound of 6d. lard." When Inspector Walker came into the shop the defendant opened the door of the glass cupboard in which the lard was kept and showed him a label, on which was the word "Lardine," which he could not see when the door was closed.

Inspector Walker gave corroborative evidence, and it was stated that the certificate of the county analyst (Mr. Fairley) showed that the substance contained 57 per cent. of foreign fat.

This concluded the case for the prosecution, and Mr. Peckover called the defendant who denied that the label could not be seen when the door of the cupboard was closed.

Mr. Bruce: How is a man to know that "Lardine" is not the same as lard?

Mr. Peckover: I should have thought your worship that the fact that a man asking for sixpenny lard shows that he does not expect to get pure lard. Continuing he said, that the addition of the syllable "ine" to butter was well understood, and he thought the same meaning would be attributed to "Lardine."

Mr. Bruce: In this case I have no doubt the defendant intended this man to take what was sold to him as lard. The public will insist on cheapness, and the shopkeeper is willing to supply them with what they ask for. I shall inflict a fine in this case of 50s. and costs.

DR. CAMERON'S FOOD AND DRUGS ACT AMENDMENT BILL.

The Strand Board of Works at their last meeting decided to oppose Dr. Cameron's "Free Fraud" Bill, for the reasons that caused Islington, Kensington, and other local authorities to oppose it. The Strand authorities recognise that it would stop the adulteration Acts altogether, and make fraud universal.

BERMONDSEY VESTRY ARE TRICKED INTO SUPPORTING THE BILL.

At the last meeting of the Bermondsey Vestry the Law Clerk's report alluded to the introduction of a Bill in Parliament, providing that in cases where wholesale dealers provided retailers with articles, subject to the provision of this Act, it would be implied that a warranty is given with the goods unless a declaration is made to the contrary.

Mr. Pomeroy observed that this Bill would prove to be favourable to the interests of Bermondsey inhabitants, and moved that the vestry petition in its favour, which was agreed to.

We are astounded that such a motion should be made and carried by any body of guardians of the public welfare. We do not know who is this Mr. Pomeroy, who stated that the Bill would prove to be favourable to the interests of the inhabitants of Bermondsey, but we do know that there is not an atom of truth in the statement, and that the vestry has resolved to petition in favour of a Bill to encourage universal robbery at the expense of English industries and of the inhabitants of the parish, but more especially the poor. But why have the Bermondsey officials, the public analyst, medical officer and inspectors not shown the vestry the real aim of Dr. Cameron's Bill? Were they to do so, we venture to say that there is not one honest member of the board but would be anxious to cancel the decision to support the artful thievery-encouraging measure.

A GLASGOW NEWSPAPER EXPOSES DR. CAMERON'S BILL. The Glasgow Evening News, April 6th, says:—

DR. CAMERON'S "LITTLE BILL."

Dr. Cameron, M.P. for the College Division, is of opinion that the law as to adulteration requires amendment. Most people will agree with him until they learn that by amendment Dr. Cameron does not mean progression and improvement, but retrogression and stultification. In the present state of the law, the retailer who sells to the consumer an adulterated article is liable to prosecution. That seems a natural and proper course. Dr. Cameron thinks not, and he therefore proposes to Parliament that the retailer be relieved of the onus, and that the responsibility be cast upon the wholesale merchant. If this does not mean that the public will have less protection than before from being cheated or half-poisoned by such shopkeepers as happen to be not over scrupulous, it means nothing at all. The relationship between the wholesale dealer and the retailer is a business relationship pure and simple; that between the shopkeeper and those who buy and consume his goods is something more. The retailer buys from the wholesale merchant in order to sell; the community buys from the retailer to consume, not in the way of business, but as a necessity of nature. We grant that in the first case it is

desirable and just that the goods over which the transaction takes place should be what they are represented to be; but in the second case it is immeasurably more important that this should be so—wholesomeness and purity are not merely a business matter, but a pre-eminently vital consideration. Dr. Cameron ignores the fact that the only remedy the public have must be against the person from whom they purchase the goods. Take away that remedy, and the buyer will be at the mercy of the unscrupulous, as it will be too difficult a process and too expensive to get at the manufacturer. Of course, the retailer should have a remedy against the manufacturer, and the State should supply some machinery to that end. But not at the risk of the public. The purchaser can be easily deceived—he cannot distinguish between the Simon Pure and a deleterious imitation. The position of the retailer is, or should be, different. He should be able to know what he is getting from the manufacturer, because it is his business to deal with the commodity he is purchasing. Nobody can desire injustice to be done to the shopkeepers. They are a worthy and deserving class of the community, playing a useful part in the amenities of life; and we do not believe any great number of them are so inconsiderate and absurd as to imagine that their particular interests are of more importance than the general interests of the whole community. Yet this is the practical significance of the “little bill” Dr. Cameron has in hand.

After exposures and condemnations such as it has received, we are surprised that Dr. Cameron should persevere with a Bill which he must know does not possess one redeeming feature.

THE “PALL MALL GAZETTE” ON DR. CAMERON’S BILL.

In its issue of April 7th the *Pall Mall Gazette* says:—

It is remarkable how little notice has been taken of the bill introduced by Dr. Cameron to amend the Sale of Food and Drugs Act. The bill has been before the House all the session, but it was only last week that the block was placed against the bill by Mr. Heywood Johnstone, the new member for the Horsham Division, who has done so in the agricultural interest. As is pointed out by Dr. Teed, in the report he has made to the Islington vestry, an extract from which we have published, its effect would be to render the Adulteration Act a dead letter, while by removing margarine from the operation of that Act it would permit of poisonous “preservatives,” and other foreign matter being incorporated with the butter substitutes. There are other grave defects and objectionable proposals in the bill; but this one item, designed for encouraging the margarine traffic, is in itself absolutely destructive of the struggling English dairy-farming industry.

THE LANCET ON ALUM IN BAKING POWDER.

The *Lancet*, September 6th, 1892, said of the use of alum in a powder which is only used for one purpose—that is, to give porosity and lightness to bread. “Bearing this in mind, and not supposing for a moment that baking powder is *per se* a food, it is a moot point whether the powder in question could not be regarded as being sold to the prejudice of the purchaser. It consisted of alum and bicarbonate of soda. These substances when moistened interact, carbonic acid gas escapes, and there remains a residuum of sodium sulphate and alumina. Apart from the fact that there is formed by this double decomposition a salt of strong purging qualities—viz., Glauber’s salt—it is important to consider what is likely to be the action of the newly formed alumina. It is well known that alumina when precipitated in the presence of certain soluble matters will render them insoluble. This is especially the case with soluble nitrogenous matters. In the chemical treatment of sewage, for example, a large proportion of the soluble nitrogenous matter is removed by adding to the sewage a mixture of sulphate of alumina and an alkali (generally lime). Alumina as a gelatinous precipitate is thus produced, which then, combining with the organic matter in solution as well as that in suspension, subsides as a ‘sludge’ in the precipitating tanks. The same method is adopted for fixing otherwise soluble colours or dyes, the ‘alumina compound’ formed giving rise to the so-called ‘lakes.’ Further than this, alumina combines with soluble phosphates to form insoluble phosphate of aluminium. Surely, in the light of these facts, it is seriously to the prejudice of the purchaser if, when he buys a baking powder, he receives one which is calculated to reduce very materially by reason of the nature of its ingredients the food value of his ‘staff of life’ by rendering both the nutritious and the bone-forming constituents in it insoluble and indigestible. If baking powders must be used, alum should not enter into their composition, especially as there are other comparatively inert and equally effective agents procurable. When a baker uses alum in his bread or flour, proceedings are successfully taken against him under the Food and Drugs Act, and it is reasonable to expect that the same Act should protect the purchaser against alum introduced into his bread in any other form, not excepting that of a baking powder.”

DISEASED MEAT.

Moses Sharp, butcher, was charged at Stockton, on the 13th inst., with depositing diseased beef for sale. Mr. Archer appeared for the Corporation, and Mr. Barnley defended. The case was that the animal was exceedingly emaciated, and the way in which its flesh came away from the bone indicated that it was unfit for food. The defence was that the medical officer himself had said he would not recommend a prosecution, and that there were no indications of disease. A fine of £5, including costs, was imposed.

ANALYST’S REPORTS.

ESSEX.

Mr. T. A. Pooley, the County Analyst for Essex, in his quarterly report for the period ended March 31, states that 154 samples had been submitted to him, of which 16 or 10·4 per cent. were certified to be adulterated. The samples came from the following districts:—18 Police Divisions of the County, 102 analysed, four adulterated; Metropolitan Police District, 41 analysed, nine adulterated; Walthamstow Local Board, 10 analysed, two adulterated; private individual (Romford) one sample analysed and found to be adulterated. A marked improvement is thus shown in the rural districts, but in the metropolitan portions of the county the percentage of adulteration is as high as ever. Of 58 samples of butter analysed, four were found to be adulterated; of 44 samples of milk, eight adulterated; two samples of cocoa and one of egg powder were analysed and found to be adulterated; of five samples of lard analysed one was found to be adulterated. The other samples analysed, but in which no adulteration is reported, were, Tea (12), spirits (11), pepper (8), vinegar (6), mustard (4), condensed milk (1), coffee (1), bread (1). “The adulterations detected (says the analyst) were the mixture of margarine with butter, the dilution of milk or the partial abstraction of cream from this article, the addition of starch and sugar to cocoa, the mixture of vegetable fats with lard, and the use of alum as a substituent of egg powder, the last named being the only sophistication which could be classed as ‘injurious to health.’ Amongst the samples certified as ‘genuine’ were several which were of very doubtful purity, but as such articles as milk and butter naturally vary much in quality, it is necessary, in order that no injustice may be done, that very low standards of quality should be taken as the basis of comparison. With the exception of milk, however, I am of opinion the average purity of the food supply of the County continues to improve.” There had been only eight convictions under the Act during the quarter, and fines amounting to £15 15s. in the aggregate, with costs in each case, had been inflicted on offenders. The small proportion of convictions to cases of adulteration was due partly to the fact that in many instances the extent of the adulteration was not deemed sufficient to necessitate a prosecution, and partly to the many legal technicalities which surround this Act. When defendants were charged under this Act, the excuse was frequently made that they had only sold the article in the same condition as received from the wholesale dealer; in such cases justices naturally took a very lenient view of the offence, and either dismissed the case or inflicted only a nominal penalty. The manufacturer or wholesale dealer could rarely be brought before the Court, and thus the Act seemed to bear with undue severity on the small retailer. A Bill ostensibly to remove this defect had been brought into Parliament, but by the proposed amendment of section 25 the Act would become practically a dead letter as against the retail trader, whilst the fraudulent wholesale dealer or manufacturer would equally escape, since the Bill provided inadequate machinery for bringing him before the Court. It was to be hoped this Bill would be very carefully considered before it was allowed to pass.

LEEDS.

The report of Mr. T. Fairley on analyses made for the City of Leeds during the quarter ending March 31st has been published. The following samples have been received:—Milk, 47; condensed milk, 1; cream, 1; butter, 2; lard, 7; tinned peas, 2; tinned lobster, 1; flour, 1; pepper, 1; soda water, 2; baking powder, 3; olive oil, 1; total, 69.

Two of the samples of milk were adulterated with 33 and 32 per cent. of water respectively, and 6 were reported as of low quality. Three of the samples of lard were adulterated with 60, 57, and 54 per cent. of foreign fat respectively, and three were of low quality. The samples of tinned peas contained copper corresponding to three-quarters, and one and a half grains of copper-sulphate per pound respectively. The tinned lobster contained traces of compounds of tin and lead. The other samples were genuine.

DR. MORITZ ON BEER.

The *Standard*, of the 13th inst., has a letter from Dr. Moritz, in which he says:—

SIR,—In your leading article of to-day upon the meeting of the Central Chamber of Agriculture, held on the 11th inst., you say—“Adulterated beer is distinctly unwholesome, and, moreover, it is the cause of four-fifths of the drunkenness which is imputed to beer in general.” This sentence might be held to imply that brewers adulterate the beer they brew with substances possessing injurious and intoxicating properties, and if so construed, it would do undeserved harm to the brewers, who are perfectly innocent of any such abominable practice.

Beer is an article of food under the Food and Drugs Act, and as such, samples are being continually examined for noxious adulterants by the public analysts. Thousands of samples are similarly analysed by the Government chemists at Somerset House. Yet neither the public analysts nor the Government analysts discover any injurious substances in beer. Quite recently it has been explicitly stated in the House of Commons by the Chancellor of the Exchequer that,

out of 2,044 samples of beer analysed during the past financial year, in no case was the existence of a noxious ingredient found.

If noxious ingredients are really present in beer, what are they, why are they not discovered, and why are the offenders not brought to book? Is it suggested that the noxious adulterants are too subtle to be detected, or that their detection in beer is different to their detection in other articles of food? If so, the suggestion is absurd. The fact remains that no injurious adulterants are found in beer when it is examined by the most expert persons, and for this very excellent reason—there are none to find.

I am, Sir, your obedient servant,

E. R. MORITZ, Consulting Chemist to the
Country Brewers' Society.

72, Chancery-lane, London, April 12.

Brewers have a fancy for compelling their apologists to go the whole hog, which may explain Dr. Moritz's special pleading, and abundance of assertion. No one, however, supposed the brewer used poisonous or injurious substances in beer in quantities sufficient to kill at once his customers and his trade. He would be an ass if he did. Dr. Moritz only assumed that for the purpose of writing a letter, but against Dr. Moritz's not wholly disinterested defence of his clients, a little truth may as well be given. We know a Liverpool brewer whose customers ask for a "pint of beer and the key of the back door"—his brew being by experience found to be one of the most effectual of existing purges. We have the evidence of Government returns to prove that barley-growing was decreased by 500,000 acres in ten years, and that the use of sugar for brewing and distilling has increased by 500,000 cwt. How much agriculture and English labour has lost by this, Dr. Moritz or his employers do not tell us. Neither do they tell us how it is that whilst the cost of production of beer has been so greatly reduced by the use of substitutes, and that although beer is much lighter now than it was a few years ago, the price remains the same. English labour may be thrust off the land, but the colossal brewing firms that use rubbish in place of malt and hops, go on amassing their greater profits. It is only a few weeks ago that Dr. F. L. Teed reported to the Camberwell Vestry:—

"I would like to point out the peculiar condition of the law with regard to malt liquors. By the agitation firstly of the hop-growers, and secondly of the farmers, the tax on hops, and the tax on malt, have both been repealed. Before the repeal of the hop tax, it was an offence to add any bitter, other than hop, to beer. It was considered an offence, not against health, but against the revenue, and any brewer having for sale other bitter substances on his premises was liable to punishment. As soon as it ceased to be an offence against the revenue, bitters of all kind were allowed to be added, according to the taste and fancy of the brewer, hence one result of the repeal of the hop tax, was to greatly injure the hop growers.

"Before the repeal of the malt tax, the only substances allowed as malt substitutes in beer were sugars, but since the malt tax has been abolished, and the brewer pays his tax on the amount of wort produced, there is nothing in law to prevent him from making his beer from whatever pleases him. Raw grain, rice, and even potatoes have been experimented on as sources of beer.

"From this brief sketch of the legislation on beer, it will be seen that beer is a substance entirely without definition. It need contain neither malt nor hops, and may be of any strength whatever."

In September last, another public analyst wrote us:—

"Owing to the excise authorities, advised as they are by Dr. Bell and his colleagues at Somerset House, the present state of regulations concerning beer is truly deplorable. For fiscal purposes one substance after another has been allowed to be put into beer. There is no need to add malt, nor to use hops; there is no regulation as to the minimum strength; you can add as much salt as you like, and injurious preservatives in any amount, to counteract the effects of bad brewing. In fact, beer at present, thanks to Somerset House, may be any alcoholic decoction which the ingenuity and dishonesty of a brewer may suggest, and if a public analyst takes proceedings against a particularly bad sample, he is met in Court by interested brewers' chemists, who swear that all is as it ought to be, and Somerset House appears with all its official weight and defends anything and everything. As a public analyst, I frequently am called upon to analyse beer for the authorities under which I act, but I have invariably to report that, according to excise regulations, such samples are genuine. My authorities, who know in many cases that the samples sent me are of vile quality, no doubt think that they have either a fool or an incompetent chemist as public analyst."

In the face of such facts as these, we can only say that it is a pity such twaddle as this of Dr. Moritz to the *Standard* should find its way into print.

Mr. Charlton, Sanitary and Food Inspector to the Jarrow Town Council, in his report for March says, he submitted 19 samples of various articles to the county analyst, who certified that 15 were genuine, whilst 4 were adulterated; these being sample No. 2—arrowroot—adulterated with 66·66 per cent. of corn flower; samples Nos. 3, 5, and 6—lard—adulterated with 12 per cent., 5 per cent., and 10 per cent. respectively of beef fat. The Sanitary committee recommended that the inspector be authorised and instructed to take necessary legal proceedings against the sellers of the adulterated articles, and that the Town Clerk be instructed to conduct the prosecutions.

REPORTS AND ANALYSES.

THE ANGLO-SWISS CONDENSED MILK COMPANY'S CONDENSED MILK (MILKMAID BRAND).

We have examined samples of this milk purchased from independent sources and find it of absolutely pure quality. Its composition showed average fat 11·10 per cent., and albuminoids 10·97, conclusive evidence that it was made from genuine full cream milk. Much attention has of late been directed to the very important question of condensed milk purity, and the Local Government Board's report for 1891-2 states that—

"With regard to condensed milk, it seems necessary to repeat the warning contained in our last Report against the use of inferior brands of this article. In several cases the analyses show that inferior sorts are made from skimmed milk, and possess very slight nutritive qualities. The analyst for the Strand district reports as follows on this subject:—

"One example contained 1·50 per cent. fat. The original milk from which it had been prepared had therefore been deprived of at least 80 per cent. of its fat. For infants it was recommended that the milk should be diluted with from 8 to 13 times its bulk of water. The consequence of feeding a child on such a mixture would be *semi-starvation*.

"Similarly, the analyst for Kensington reports that a sample was wanting in at least 90 per cent. of its fat and that the directions given on the label as to dilution would, if followed, result in producing a weak liquid, which, if used as the sole food of infants, would undoubtedly be seriously injurious to their health. No doubt plenty of condensed milk is sold which has not been tampered with in this fashion, and it is important that the public should be taught to reject that which has been deprived of nearly all nutritive value."

We have before us some samples of spurious condensed milk, that freely bear out the warning of the Local Government Board.

One sample, "The College Brand," affords a flagrant instance of the lengths to which deception of the purchaser is carried. The label states: "This milk is specially prepared from the richest cow's milk (from which the cream has been removed)." It is further stated that it "is the best for household purposes," and that for infant's use "it is to be diluted with 8 to 15 parts of water, according to age." The amount of fat in this class of skimmed condensed milk is only that left by the separator—from 1 to 3 per cent. The total casein present in these tins of condensed milk is some 11 per cent., which is for infants very indigestible when not combined with the fat which in this case the milk is deprived of. To dilute the substances in question with 15 parts of water would reduce the total casein and fat to less than one per cent., and yet these preparations are permitted to be thus falsely labelled as condensed milk, and are recommended for infants' use. The unrestricted sale of the skimmed milk preparations cannot be too strongly discountenanced, and the public need to be warned against the purchase of any condensed milk, save such as contain the full cream. Condensed milk adulteration is one of the worst and most dangerous adulterations existing, and it is well to know that at least some of the condensed milks are genuine.

THE CROWN PERFUMERY COMPANY, 177, NEW BOND-STREET, LONDON.

We have received samples of specialties of this company—Crown apple-blossom perfume and Crown lavender salts. The perfume is extra concentrated, delicate, and void of the vulgar characteristics of so many of the perfumes in general use. It is, in point of fact, an ideal lady's perfume. The lavender salts have the effect of ordinary smelling salts, the unpleasant odour being nullified by an agreeable perfume of lavender water. They are invigorating, and a distinct advance on the old-fashioned preparations, the salts themselves being far stronger than any others we have tested.

THE TASMANIAN EUCALYPTUS GLOBULUS OIL (PLATYPUS BRAND), 138, LEADENHALL-STREET LONDON.

We have examined samples of this Oil of Eucalyptus, the absolute purity of which is guaranteed by the makers. Our own examination corroborates the results arrived at by Mr. H. Helbing and Dr. F. W. Passmore. Messrs. Helbing and Passmore say:—

"This oil is a product which leaves nothing to be desired as an eucalyptus oil for use in medicine. Not only is it rich in eucalyptol, and free from bodies that irritate the mucous membrane and give rise to coughing, but the oil is most carefully distilled, of constant composition, most agreeable in aroma, and especially suited for prescription by physicians who desire a really genuine and active oil of eucalyptus."

The difficulty of procuring pure eucalyptus oil has for some years been a troublesome one. The preparation under consideration is therefore one that will be welcomed. The company also prepare pastilles for the voice and throat which are pleasant in taste, and should be found very useful for antiseptic purposes.

CIRCULAR NOTES.

THE SALT IN BEER QUESTION.

In the Queen's Bench Division of the High Court of Justice, on the 12th inst., the case of *Thornley v. Short* came on for hearing before Baron Pollock and Mr. Justice Kennedy, sitting as a Divisional Court. Mr. Abel Thomas, Q.C., said it was a special case stated by the justices of Merthyr. The summons had been taken out against the respondent, who had been a publican, for selling beer in contravention of section 6 of the Food and Drugs Act. Mr. Moulton, Q.C., who appeared for the respondent, pointed out that the justices had acquitted his client under the section, and dismissed the summons with costs. They formally found that the article sold was of the substance and quality demanded, but that had not been stated in the case. Mr. Thomas said the respondent was charged under section 6 of the Act with selling beer to the prejudice of the purchaser, in that the beer was adulterated with salt. The quantity of salt proved to have been added was between 50 and 63 grains per quart. Evidence was called on the part of the appellant that the salt was sufficient to cause thirst, after a time, instead of quenching thirst. Strong evidence was called on the other side that the appellant's scientific witnesses were wholly wrong, that it could not cause thirst at all, and that it was necessary a certain quantity of salt should be added to the water with which beer was made when the water was particularly soft. Mr. Moulton: The evidence was absolutely contradictory. Mr. Thomas: Yes. The only point I shall ask your lordships to decide is that you will tell the justices it is for them to consider whether or not the quantity of salt was such that it came within the words of section 6—"That no person shall sell to the prejudice of the purchaser food not of the nature, substance, and quality of the article demanded" under a certain penalty. In the end their Lordships sent the case back to the justices to find whether the beer was of the nature, substance, and quality of the article demanded by the purchaser.

FIFE FARMERS CONTEMPLATE A WORTHY STEP.

Sir Ralph Anstruther, Mr. C. G. Dawson, and other gentlemen interested in the development of dairy farming in Fife, have sent out circulars to the farmers in the districts of Largo, Ward and Carnbee, proposing the establishment of cheese and butter factories on the co-operative system, and asking how many cows they will guarantee. The proposal is to guarantee a price for the milk for twelve months and to give farmers a share in what profits the company may make after the payment of interest and depreciation. This is a step in the right direction and one which we hope to see followed in other parts.

CROYDON AND ITS MAGISTRATES.

Our contemporary *The Westminster Gazette* on the 10th, says: "The Croydon magistrates seem to have singular notions as to what constitutes adequate punishment in some of the cases with which they deal. We recently called attention to a charge of shocking cruelty to a horse, which they considered fully met by a merely nominal penalty. On Saturday they had a farmer before them who was charged with starving several horses to death. These animals the defendant had taken to "grass" at 2s. a week each, and he had actually exposed them to a slow death in a field where there was no food. Yet a fine and costs was the only penalty the magistrates thought it necessary to impose!"

IRELAND AND CREAMERIES.

Mr. R. A. Anderson, secretary of the Irish Branch of the Co-operative Union, in an interview with a representative of the *Cork Herald*, has communicated some interesting facts as to the success of the Co-operative Creameries established during the last few years in Ireland, in great measure through the efforts of Mr. Horace Plunkett, M.P.:-

Twenty-three out of twenty-five of these institutions at work last year produced 910 tons of butter, although some of them were in operation for only part of the season. The money return was £98,969, or 108s. 9d. per cwt., a very good average. The milk cost a small fraction over 4d. per gallon, and the cost of working the creameries, including interest on capital, was 19s. 2d. per cwt. of butter, or a very small fraction (one-eleventh) over 1d. a pound. Mr. Anderson says that the cost of making butter in a well-managed creamery, at work for the whole season, is only 7s. per cwt., or 3d. a pound. Last year the creameries averaged almost exactly a pound of butter to two and a half gallons of milk, which is very good considering that there were no Jerseys among the cows which supplied the milk. After allowing for depreciation of buildings and plant, there was a profit to divide among the co-operating farmers. The average price paid for the milk was not high, but was considerably more than small Irish farmers can obtain by converting their milk into butter at home, and they get all the separated milk and butter-milk back from the creameries free of charge. Irish creamery butter has already obtained an excellent reputation in the English markets, and if the plan of making it all through the winter can be carried into effect, it will compete with Danish butter under advantageous conditions.

WORCESTER DECIDES TO RIGOROUSLY ENFORCE THE FOOD AND DRUGS ACT.

At a meeting of the Worcester City Council, Sir Douglas Galton presented the report of the Sanitary Committee, which represented to the Council that in the opinion of the committee the Sale of Food and Drugs Act, 1875, was inefficiently administered throughout the county, and they recommended the Council to direct that not less than 1,000 samples of food and drugs be in future annually submitted for analysis by the county analyst. Mr. Howard spoke of the inefficient manner in which the Food and Drugs Act was carried out, and urged that the recommendation of the committee should be adopted. Mr. V. Milward submitted, as an amendment, for the words "that not less than 1,000 samples," the substitution of "an increased number of samples." In the amended form the report was agreed to. The Chairman expressed the opinion that if the Council wanted an improvement in regard to the inspection of food and drugs they must get the Act altered.

SHEFFIELD AND INADEQUATE FINES.

At the last meeting of the Sheffield City Council Mr. Nadin remarked that as there were several magistrates present, and many more who hoped to be—(laughter)—he should like to call their attention to the small fines of 15s., 20s., and 40s. recently inflicted on three milk sellers for adulterating their milk. They could make up those fines in less than a week by adulterating again. It would, he thought, be much better if the magistrates would give each such person two months' hard labour, and if he came a second time a taste of the lash. (Laughter.) To sell adulterated milk for the use of poor children was like murdering them. (Hear, hear.) Alderman Clegg agreed that the fines inflicted for adulteration of milk were not sufficient. He was informed the other day of a man who had been before the magistrates and fined for such an offence. He afterwards went to a public-house and told the people he had been summoned and fined, but said he, "after the inspector had taken the sample I went on mixing, as I knew he would not come again until the case had been heard, and I made more out of it than the fine and costs came to." (Laughter.) If the magistrates would inflict heavier fines it would be better for the public.

The Town Clerk said a letter had been received from the Standards Department of the Board of Trade enclosing a copy of the report made to them by their superintendent of weights and measures on his inspection at Sheffield. The magistrates appeared to inflict such small fines on those using unjust weights and scales that the example of giving just weight hardly appeared to be fully encouraged. Alderman Carter moved that the report be referred to the General Purposes Committee, and that a copy of it be sent to each magistrate for the city. Alderman W. E. Clegg seconded, and it was agreed to. Mr. A. M. Wilson: I propose we include the Stipendiary in the list of magistrates. (Laughter.) The Mayor: I suppose he is a magistrate; in fact he is two. (Laughter.) Mr. H. W. Chambers: Send two copies to the Stipendiary. (Renewed laughter.)

THE PURITY OF SEEDS.

The annual report for 1892 of Mr. Carruthers, the Consulting Botanist of the R. A. S., while showing that the efforts made by the Council to establish the guarantee system for seeds, and the publication of statements relating to the subject in the Royal Journal, have been productive of an immense amount of good proves that they require still to be followed up, as in a great many instances seeds are offered in the market sadly defective in purity as well as in the power of germination. Mr. Carruthers says: The samples of *cocksfoot* examined had an average germination of 86 per cent. This would have been much better had it not been for a few exceptional samples that grew only 50 per cent. or a little over. The seeds were generally pure, though one sample contained 20 per cent. of other seeds, mostly of worthless grasses and weeds. *Meadow fescue* germinated very satisfactorily, the average being 93 per cent., and was almost without exception free from other seeds. *Tall fescue* germinated 92 per cent., after excluding one sample which was very poor and badly ergoted: otherwise these seeds were clean and good. *Timothy* was pure and free from admixture, and grew rather over 97 per cent. *Meadow grasses* germinated well, but the rough-stalked contained many impurities, one sample having half its bulk made up of chaff and the seeds of inferior grasses. More than a third of the samples of perennial rye-grass contained such a quantity of other seeds—chiefly Yorkshire fog and brome grass—as to deteriorate their value. *Italian rye-grass* was more pure and germinated well. *Clovers* were satisfactory as regards germination, but they contained a greater proportion of impurities than were met with in grass seeds. One-half of all the clovers had a considerable quantity of weeds; and a twelfth of the samples of red clover contained seeds of dodder, which were also present in Alsike. A sample of *lucerne* had a large quantity of dodder. *Trefoil* was throughout of high quality, and germinated well. The samples of *yarrow* were excellent.

HINTS TO FOOD AND DRUG INSPECTORS.

By B. SCOTT ELDER,

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It is just possible that the following fragments may prove interesting, and, perchance, profitable to some Inspectors under the Food and Drugs Acts. The ranks of the Inspectorate during the past few years have been considerably swollen by the appointment of officers who had previously received very limited training, and to whom, even now, many details may be unknown. No attempt will be made to mould these notes into the stereotyped form of a "contributed paper," indeed, the desire is to keep as far as possible from that ambitious height, so, without any introduction, will you accompany me through the following seven points?

1.—*Make yourself acquainted with the general procedure in Courts.*

As the Inspector's duties will often demand his appearance in Court, it is absolutely essential that he should know the details of legal procedure, and those rather fully. With a knowledge that he is treading on sure ground he will be able on many occasions to clip the wings of the lawyer who takes it for granted that he can say anything or do anything, or quote anything, simply because he is not opposed by another professional gentleman. Moreover, by an Inspector's action in Court will his position therein be made or marred.

2.—*Claim the right to open your case and address the Court.*

This most important right, which distinctly belongs to the informant is, I regret to say, very often left unappropriated by the Inspector. True enough, objections are raised over and over again by the legal fraternity, indeed, it is but natural; but both from the Summary Jurisdiction Act of 1848, and from decisions given in the Higher Courts, it is conclusive that this valuable right belongs to the informant. The Court in giving judgment in the case of *Duncan v. Tims* (36 L.T. 719), held that:—

"An informant or complainant in summary cases is entitled to open his case and address the Court, also to examine and re-examine his own witnesses, and to cross-examine witnesses called for the defence; also that his right is not affected by his giving evidence as a witness."

It is necessary that one should be well posted up in this point, as even magistrates' clerks themselves are apt to overlook it, either wilfully or otherwise, and unless the Inspector is able to hold his own, the right will surely be refused him.

3.—*Examine the Summonses, if possible, before service.*

Although this, perhaps, does not strictly come within the scope of the Inspectoral duties, it is very advisable both for the Inspector to ascertain that the summonses are made out in proper form, seeing that he is conversant with the many details of the Act, at all events very much more so than the junior clerks to whom the duty is often delegated. Speaking from experience, this practice, trivial though it may appear, has averted over and over again unnecessary delays and annoyances.

4.—*Never usurp the place of the Public Analyst.*

The practice which is spreading among Inspectors of assuming the responsibility for the particulars stated in the analyst's certificate is, to my mind, very objectionable. While not for one moment disparaging the idea that an Inspector should be acquainted—and intimately acquainted—with the nature of the article, the genuineness of which is in question, it appears very undesirable that he should endeavour to give his own knowledge in place of the superior knowledge of the analyst, and indeed a display of limited knowledge might very easily, at a critical moment in a prosecution, result in the dismissal of the case. If the certificate is disputed, and the analyst has not received notice to attend, in accordance with Section 21 of the Act, you are morally bound to call the attention of the Court to that fact, and ask for an adjournment in order that he may have an opportunity of defending his own certificate. This, to the analyst, is an important matter, and it is a duty you owe to him.

5.—*Never allow an outside Analyst's Certificate to be introduced.*

It is painful to note how often a case becomes shrouded in uncertainty, and ends in total collapse through want of observance of this particular. The Act of Parliament provides that

the certificate of "the" analyst shall be sufficient evidence of facts stated therein, therefore the certificate of another analyst—except, of course, that of Somerset House—should never be allowed to be introduced into the case, or even referred to.

6.—*Wherever and whenever possible, purchase your samples by deputy*

True, there are several articles of food which an Inspector can purchase equally as well as a deputy, but in order to detect fraud it is almost absolutely necessary that the purchase must be made in disguise, and considering the fact that by decision of the Queen's Bench Division this mode of purchase is quite legal, why not adopt it? It is a very easy matter for an assistant to assume the garb of a sailor, with a carpet bag slung over his shoulder, or perhaps the "make-up" of a tramp or a "navvy" may better suit his purpose. In many purchases women and girls can be employed with the greatest advantage. After the purchase is completed, either by the Inspector or his deputy—*let the words respecting the sample itself be few*—as one never can tell the appearance of one's own assertions when reproduced by an experienced lawyer. I do not say that a dull monotony should prevail, while the necessary dividing and wrapping up are proceeding; on the other hand let the conversation flow genially on topics of general interest. I cannot impress too deeply upon Inspectors the necessity of proceeding in a gentlemanly and courteous manner about their work. Alas, that such a reminder should be necessary!!

7.—*Exercise care in the following details.*

It is necessary that the portions be placed in suitable vessels or wrappers, in order that the sample may not suffer by evaporation or by the action of absorption, which is a peculiar property belonging to certain classes of paper when used for wrapping purposes. The portions should be made so secure that it would be absolutely impossible to tamper with the article without breaking the seal, and the original wrapper, in which the article was sold, should in every instance be preserved. If the purchase be made by a deputy, the full facts and particulars of the purchase should be taken down by the Inspector in writing immediately on his return to the office, and this original document should be produced in Court if necessary. A portion of the sample should be submitted to the public analyst at the earliest possible moment, as, especially in the matter of food and drugs—delay is dangerous. The third portion should be jealously guarded and kept rigidly under lock and key during the entire period.

Conclusion.

To the experienced Inspector, strict attention to the points enumerated above will, no doubt, have become habitual, while no Inspector can afford to neglect them. They are all the result of experience and observation, and indeed the majority of them are crucial points upon which the fate of many a case has been decided.

A QUEER CASE.

On the 10th inst., at Consett (Durham), a charge of lard adulteration was preferred against Mr. Walter Willson, Mayor of Gateshead, who is well known in the north of England as the largest retail grocer in the northern counties. Mr. Willson appeared in person to answer the charge, whilst the prosecution was conducted on behalf of the Durham County Council by Mr. T. P. Iliff, solicitor, of the firm of Messrs. Simey, Son & Iliff, Sunderland. Mr. McDonald, solicitor, of Manchester, watched the case on behalf of Messrs. Kilvert & Co., lard factors, of Liverpool. William Laidler, a deputy inspector under the Food and Drugs Act to the County Council, deposed that on March 2 he visited one of defendant's branch establishments at Consett, and purchased half a pound of the best lard. He informed the assistant who supplied him that the lard was to be analysed, and divided it into three portions, one of which he left at the shop, another was forwarded to the county analyst, and the third he retained himself. Mr. Stock, the county analyst, stated that the sample he analysed contained 7 per cent. of beef stearine. For the defence Mr. Willson proceeded to read from a lengthy manuscript in which he stated that he purchased the lard from Messrs. Kilvert & Co., of Liverpool, who furnished him with a warranty guaranteeing it to be pure. He then produced the missive, and claimed, under the Act, dismissal upon payment of costs. At this stage, Mr. Macdonald interrupted the proceedings and begged leave to say a word. Permission having been granted, he denied on behalf of Messrs. Kilvert that the lard in question was supplied by their firm. They retailed nothing but absolutely pure lard. If Mr. Willson had got hold of some other brand, then that was his own look out. Mr. Iliff, for the prosecution, objected to the "warranty" produced. It was nothing more nor less than an invoice. Ultimately the case was adjourned upon the application of Mr. Willson in order to allow that gentleman to obtain legal assistance in dealing with the charge.

ADULTERATION PROSECUTIONS.

MILK.

At Northop Petty Sessions, Flintshire, on Thursday, March 30th, John Evans, Oakenholt Cottage, Pentre, near Flint, was charged by Inspector Minshull, inspector under the Food and Drugs Act, with selling to him a pint of milk not of the quality asked for. Mr. T. W. Hughes appeared for the prosecution, and Mr. J. B. Marston for the defence. In opening the case, Mr. Hughes stated that Inspector Minshull, in his discharge of duties, took a sample of milk from a boy Frederick Lewis, in defendant's employ, whilst out delivering milk on the 15th February, and after purchasing the pint, he divided it in the usual way in three portions, one of which he forwarded for analysis to Mr. W. F. Lowe, county analyst, Chester, on whose certificate a summons was issued. The certificate showed that an adulteration equal to 17 per cent. of water, according to the standard of Somerset House, had been made, but this standard was very low, and if the standard of ordinary milk be taken the adulteration would rise up to about 22 per cent. Inspector William Minshull was called and bore out the opening statement, stating that he asked for a pint of milk, paying 1½d. for it. He saw the boy coming out of defendant's yard, and there was no opportunity for him to add water before he accosted him. He told him for what purpose he requested the sample, and the boy took the owner's portion straightway back to the house. Mr. W. Foulkes Lowe, county analyst, was next called, and gave evidence to the adulteration. He produced his certificate, which showed that by the standard at Somerset House it was adulterated to the extent of 17 per cent. with water, but as compared with milk of ordinary quality, it would be as high as 22 per cent. Cross-examined: Witness said it would make a slight difference if the milk was from cows poorly fed, but the low standard at Somerset House allowed for that. This closed the case for the prosecution, and for the defence the defendant, John Evans, was called, and stated that he had four milking cows and seven acres of land, the deficiency in food being made up by chopped hay, turnips, mangolds, bran, Indian meal, and brewer's grains, which he considered a good diet. His wife personally superintended the dairy, and he solemnly denied that either he or his wife allowed water to be put in the milk. He had sent his sample of milk to be analysed after the receipt of the summons, and the report received was found to be identical with Mr. Lowe's. The boy Lewis was not the best of boys. In reply to the Bench, witness said it was possible for the boy to have added water, but he did not suspect him of doing so. The Chairman said that the Bench had considered the case proved, and such dealings, while he thought the present case was not so bad as they sometimes met with, must be stopped in the interests of the public. Looking at the large costs, they thought a fine of 1s., and costs, £4 13s. 4½d., would meet the case.

At Nuneaton Petty Sessions on the 4th inst., William George, dairyman, Nuneaton, was summoned for selling milk adulterated with six per cent. of added water, and deficient of 15 per cent. of its natural fat. Defendant pleaded not guilty. Police Inspector Poultney said, acting under instructions received from the Local Board, he purchased a pint of new milk from the defendant on the 8th March, and divided it into three parts. He gave one to defendant, kept one himself, and sent the other to Dr. Bostock Hill, the county analyst, who reported as above. The defendant said the only water in the milk had gone through the cow's mouth. He accounted for the absence of the cream because the sample was taken from the bottom of the bucket. Asked if he wished to call the analyst, the defendant said no two analysts could agree. In a recent case a milkman had been twice fined, and on the third occasion they took the cow up to London and had it milked in the presence of the judge; and upon analysis it was found that that milk contained water. Defendant was fined in all £2 11s. 6d.

At the Lambeth Police-court, on the 6th inst., Mrs. Elizabeth Jones, of Ilderton-road, South Bermondsey, was summoned by Inspector Eagle, on behalf of the Camberwell Vestry, for selling milk containing 20 per cent. of added water. Mr. Sheil imposed a fine of 40s. and 12s. 6d. costs.

Thomas Jones, of Lugard-road, Peckham, was also summoned for selling milk containing 9 per cent. of added water. In this case Inspector Eagle said he purchased the sample from one of the defendant's men in the streets. The defendant was a dairyman. Mr. Sheil ordered the defendant to pay a fine of £3 and 12s. 6d. costs.

Before Sheriff Grahame, at Perth, on the 7th inst., a woman was charged with having sold a quart of sweet milk which contained 6 per cent. of skimmed milk from a cart belonging to her in Chapel-street, Aberfeldy, on 21st February last, in contravention of section 6 of the Sale of Food and Drugs Act, 1875. Accused was in consequence of ill-health unable to be present, and the trial, which proceeded in her absence, was watched on her behalf by Mr. James Harper, solicitor, for Mr. J. Stewart, solicitor. The charge was found proved, and accused was fined 30s., the alternative being a month's imprisonment.

At Birkenhead, on the 7th inst., Richard Hooper, 264, Borough-road, was fined 5s. and costs for selling milk adulterated with water.

At Worcester City Police-court, on the 10th inst., William Pring, Northfield-street, was charged with selling adulterated milk on March 15th. Mr. S. Southall prosecuted. The milk was purchased by Mr. Sheppard, the assistant sanitary inspector, and it was found to be adulterated to the extent of 10 per cent. with water. Defendant was fined 20s., and 17s. costs.

At Southwark, on the 8th inst., Frederick Woolgar, of Well-street, was fined £5 and costs, for selling milk containing 27 per cent. of added water.

At St. Helen's, on the 7th inst., J. Burrows, farmer, Middlewich, was, as the consignor of a can of milk to Robert Roylance, milk dealer, of Cloughton-street, St. Helen's, fined 10s. and costs, as the milk, according to the analyst's certificate, had 17 parts of added water to every 100 parts of the poorest milk. Burrows strongly denied any adulteration. Roylance was also summoned for selling adulterated milk, but owing to the decision of the magistrates the chief-constable withdrew the case on payment of costs. Mr. Mearns, who appeared for Roylance, said milk dealers were continually being fined owing to the adulteration by the farmers, and the St. Helen's Dairymen's Association were determined to protect themselves from the farmers.

At Hove Petty Sessions, on the 10th inst., Benjamin Israel Wiles, 18 and 19, Cowper-street, Hove, was summoned for selling a pint of new milk not of the nature and quality demanded by the purchaser. At Hove, on the 17th ult. The offence was denied. On the day mentioned a lad named Blaber purchased a pint of milk of the defendant's boy, paying 1½d. for it. It was subsequently submitted to Mr. Moore, public analyst, whose certificate was handed in by his son, and showed that the milk itself was not adulterated with water, but was deficient in butter fat 25 per cent. by the extraction of cream. The defence was that the milk was sold in exactly the same condition as it was received from the farmer. Fined 40s. and costs (19s. 6d.), or 14 days.

At Glossop, on the 10th inst., John Harrison, farmer, Charlesworth, pleaded guilty to selling adulterated milk on the 28th of February last. Dr. Carter-Bell, analyst, said the milk had been adulterated with 15 per cent. of water, and the sample was a very bad one. Fined 10s. and costs, defendant being ordered to pay a guinea for the advocate's fee, and 10s. 6d. for the analyst.

At Southwark, on the 6th inst., Richard West, of Frearn-street, Bermondsey, was fined 40s. and costs for selling milk containing 18 per cent. of added water.

George Morton, farmer, Arden-hall, Denton, was summoned for selling milk adulterated with water to the extent of 8 per cent. Inspector Marshall said he took a sample of milk from the defendant's cart when in course of delivery to a dealer named Abraham Jones. Defendant said he could not understand how the water had got into the milk. Fined 40s. and costs.

A number of prosecutions issued against local farmers and milk dealers for selling adulterated milk, instituted under the Food and Drugs Act at the instigation of Chief Sanitary Inspector Marshall, were heard at the Stockport Borough Police-court, on the 12th inst., before the Mayor (presiding) and a full bench of magistrates. The first defendant was a farmer named William Fenna, of the Highfield Farm, Bredbury, who was defended by Mr. R. Coppock, solicitor. Mr. Dobson, deputy town clerk, prosecuted, and stated that a pint of milk was purchased from a son of the defendant as he was proceeding with his milk float along Portwood at seven a.m. on the morning of March 15th. The milk was purchased by Inspector Marshall, who submitted it for analysis, with the result that it was found to contain 7 per cent. of added water. Mr. Coppock stated that his client could not account for the adulteration. A fine of 40s. and costs was imposed.

Fanny Guest, provision dealer, of Great Portwood-street, was summoned for selling milk adulterated to the extent of 3 per cent. on March 15th. Evidence was given by Inspector Marshall, who obtained the sample and submitted it for analysis. Mr. Coppock stated that his client was only a very small dealer, and purchased all that she required from Mr. Fenna. She obtained about three quarts from his son on the morning in question, and was not aware that anything was wrong with it at the time. Mr. Coppock further remarked that it was a singular circumstance one sample of milk should be adulterated to the extent of seven per cent. and another only three, when both samples had been obtained from the same source. The magistrates imposed a fine of 10s. and costs in this case.

Mark Dixon, milk dealer, of 6, Queen-street, was summoned for selling milk adulterated with 4 per cent. on March 15th. The certificate of the analysis was submitted in proof of this, after which Inspector Marshall was called, and stated that when they found milk-sellers with adulterated milk, they generally tested the milk at the farmer's. In reply to Mr. Brown, witness stated that he took the sample from Mr. Dixon five or ten minutes after the milk had been left by the farmer. He did not see the milk delivered. The inspectors made it a point to meet the farmers as well as the milkmen in order that they could test the milk when in the farmer's hands and when in the milkmen's hands. For the defence Mr. Brown submitted that the intention of the Legislature was that the milk should be sampled on delivery by the farmer. This should have been done in this case. The analyst's certificate did not say that water had been added since the milk left the cow. At this point some discussion took place between Mr. Brown and the Chairman (Lieut.-colonel Wilkinson) respecting the admission of certain evidence. Eventually the latter said that the magistrates had decided to adjourn the case for a fortnight. Mr. Dobson asked that the case might be finished that day, but the magistrates declined to alter their decision.

Abraham Jones, of 125, Great Portwood, Stockport, was summoned for selling adulterated milk to the extent of 7 per cent. In this case, as the milk was found to be adulterated, a sample of milk was taken from the farmer, Mr. Morton. Mr. Gardiner, solicitor, Manchester, said the magistrates would agree with him that this was a case in which the Act of Parliament operated harshly against an innocent person. The milkman sold the milk in the same condition as when he received it from the farmer. The case was withdrawn on payment of costs.

At Glasgow Sheriff Summary Court, on the 14th inst., before Sheriff Erskine Murray, William Prosser, dairyman, 8, Hopehill-road, was charged with having on the 29th ult., and for some time prior thereto, permitted his milk shop to be in direct communication with a sleeping apartment. Respondent pleaded guilty, but Mr. Daniel Mackenzie, writer, stated on his behalf that so soon as the matter was complained of it was remedied. His lordship imposed a penalty of £1 1s.

THE SOUTHWARK INSPECTOR SECURES CONVICTIONS AND EXEMPLARY FINES.

At Southwark, on the 10th inst., William Brown, of Old Kent-road and Mile End-road, &c., trading as the Farmers' Direct Supply, was fined £20, and 12s. 6d. costs, for selling skimmed milk without notice to Arthur A. Grist, Inspector to the Board of Works of the St. Saviour's district. Twenty per cent. of cream was extracted in this instance, and several previous convictions were proved against this now notorious vendor of adulterated milk, who has been convicted in other Courts in London many times.

William Prior, of 70, Albany-road, Old Kent-road, was fined £5, and 12s. 6d. costs for first offence. Five per cent. added water, and 40 per cent. of cream abstracted.

David Harris, of 24, Southwark Bridge-road, £2 and 12s. 6d. costs, for first offence. Ten per cent. added water.

At Marylebone, on the 12th inst., Alfred Smith, a dairyman, of 12, Crawford-street, Marylebone, was summoned, at the instance of the Paddington Vestry, for selling milk adulterated with 10 per cent. of added water, and deprived of 50 per cent. of its cream. The sample of milk was purchased of a man named Gosser, who was selling milk from a barrow in Clarendon-street, Harrow-road. On the barrow were printed the words "Model Dairy." Gosser gave Smith's name as his master. The defence was that Gosser used to be in the employ of the defendant Smith, but owing to a difference he was discharged. Smith, as a kindness to Gosser, afterwards supplied the latter with milk at a price, and granted him the loan of his barrow to carry it round. Whatever milk was not sold by Gosser in the morning he returned to Smith in the afternoon, and paid him for the amount disposed of, so that he was neither servant nor agent. The defendant Smith gave evidence on his own behalf, and said that sometimes the milk which Gosser returned after the morning sale, he (Smith) supplied to him again on the following morning, and it was sold to the public as new milk. (Laughter.) Mr. Newton (to the defendant): I think you — Well, perhaps I had better not say what I think. I have a strong opinion about the case, but, after the defence, I must dismiss it. Had I the opportunity to fine you for what you have just said, I would, and that the heaviest in my power.

BUTTERMILK.

At Dublin, on the 15th inst., Laurence Keeley, dairyman, 24, North Gloucester-place, was fined £1 for selling buttermilk adulterated with 15 per cent. of added water in addition to 25 per cent. allowed for churning purposes. Thomas Dunne, 107, Great Britain-street, was fined £1 for a similar adulteration of buttermilk.

BUTTER.

At Truro, on the 8th inst., John Bassett, butcher, of Cannon Downs, was charged with selling butter in Truro Market on March 18th, adulterated with ten per cent. of fat foreign to butter. Defendant stated that he sold the butter, but alleged it was sent him by his daughter. Superintendent Angel said he sent butter, purchased from the defendant, to Mr. Bernard Dyer, Great Tower-street, London, the public analyst for the city, who certified that it contained at least ten per cent. of fat foreign to butter, and that no change had taken place in the constitution of the article that would interfere with the analysis. Another sample of defendant's butter sent to the analyst, had been certified as "genuine butter." Bassett was fined 5s., and 12s. costs.

At Southwark Police-court, on the 8th inst., Frederick Woolgar, of Well-street, was fined £5 and costs, for selling as butter a substance containing 95 per cent. of margarine.

At Warminster Petty Sessions on the 3rd inst., Sarah Adlam, of Horningsham, was summoned under the Food and Drugs Act, for selling butter that was not of the nature and substance that was demanded, on February 14th, to Superintendent William Perrett. Mr. Jones, of Trowbridge, appeared for the defendant. The case was dismissed, a sample of the butter not having been sent to the county analyst according to regulations.

Several of the cases which the county authorities are bringing against shopkeepers, &c., under the Food and Drugs Act were heard at the Sunderland County Petty Sessions. The magistrates present were Colonel Briggs (in the chair), Colonel Robson, Mr. R. H. Gayner, and Mr. John Dickinson. A Ryhope tradesman named Edward Appleby was charged at the instance of Mr. B. Scott-Elder, Chief Inspector under the Food and Drugs Act for the county, with selling margarine as butter. Mr. A. T. Crow, jun., appeared for Appleby, and pleaded guilty to the charge. Mr. Scott-Elder said he should only call formal evidence in proof of the charge. An assistant inspector, George Wilson, said he was supplied by defendant's wife on the 27th ult., with half-a-pound of butter at 1s. 2d. a pound. The ordinary price of margarine was from 6d. to 10d. per lb. A sample was sent to the county analyst, who had certified that it contained 75 per cent. of margarine. By Mr. Crow: The paper it was sold in was marked "margarine." Mr. Crow pleaded that defendant's wife had made a mistake, and the Bench imposed a fine of 20s. and costs.

Ann Green, Dolday, was charged with selling adulterated butter on March 14th. Mr. S. Southall prosecuted. The analyst's report showed that the butter was adulterated with margarine to the extent of at least 80 per cent. Defendant was fined £3, and 18s. costs.

At the Salisbury County Petty Sessions, on the 4th inst., before Mr. C. Penruddocke (in the chair), Colonel Everett, Mr. W. E. Matcham, and Mr. F. C. Fowle, Thomas Browne, shopkeeper, of Whiteparish, was charged with having sold an article of food on the 13th of March which was not of the value and substance of the article demanded, contrary to section 6 of the Food and Drugs Act, 1875. Defendant pleaded guilty. Mr. Nodder defended, and Mr. W. C. Powning appeared on behalf of the prosecution. Mr. Beardsley, inspector of weights and measures, stated that on the day in question, he asked for a half pound of butter at the defendant's shop, and was supplied by the defendant's wife. Witness told her that he bought it for the purpose of analysis, and she said nothing in reply. Witness could see nothing of any other pat of butter in the shop. He sent a portion of the butter to the public analyst, who returned it certifying that it contained 17.8 per cent. of water, 2 per cent. of salt, and 80.2 per cent. of fat and curd. Mr. Nodder stated that the case arose through a mistake. Defendant was not in the shop, and did not sell the butter, but it was sold by his wife. The defendant had butter in the shop at the time, but his wife made a mistake in selling margarine. The Bench held a very strong view upon the case, and thought there was a certain amount of fraud. He would be fined £5, including costs.

MARGARINE.

At Glasgow, on the 14th inst., William M'Aulay, provision merchant, 422A, Parliamentary-road, pleaded guilty to having on 22nd March exposed margarine for sale in his shop without the necessary ticket. He was fined £2 including expenses.

James Brown, grocer, 325, New City-road, pleaded guilty to a similar offence committed on the same date. In this case the margarine was found beneath the counter. A penalty of £2 including expenses was also imposed.

At the West Riding Police-court, Keighley, Friday, the 14th inst., before G. Merrall, Esq., and Alderman Holmes, Charles B. Scaife, grocer, Hanover-street, Keighley, was summoned by Mr. A. Randerson, inspector under the Food and Drugs Act, for having illegally sold margarine as butter, and also for exposing margarine for sale without labelling it as such as required by law. Prosecutor stated that on March 2nd, he visited defendant's shop to make some purchases for analysis. He bought some coffee and pepper, and then noticed three parts of a keg of butter at one end of the counter. The boy in charge told him it was superfine butter, and witness bought 1lb. of it, for which he paid 1s. 1d. The defendant was away when witness made the purchases, but returned when he had obtained the butter, and as required by law he offered to divide it, so that defendant might have a sample. Defendant declined to take a portion. On the 26th March witness received a certificate from the county analyst stating that the sample contained 30 per cent. of real butter, the remaining 70 per cent. being margarine. In cross-examination by Mr. W. A. Robinson, the defendant's advocate, witness denied that the shop boy told him it was a mixture. For the defence, Mr. Robinson admitted that the defendant had been guilty of the technical offence of exposing margarine for sale without the label; by an oversight the usual label was not fixed to the stuff on the day named. Dealing with the second charge, he said the seller alone was liable, and in this case, as the shop boy and not the defendant was the seller, the inspector had not proved his case against the defendant. The boy would also tell them that he told the inspector that it was a mixture. Even if the Bench believed that the lad sold it as butter, he was in a position to prove that he was exceeding his authority and disobeying his orders in doing so, and therefore his employer would not be liable. The shop lad, Joseph Dawson, was called, and said he distinctly informed the inspector that the substance was a mixture, and Mrs. Scaife also stated that she heard the boy give the inspector this information. The Bench imposed a fine of 40s. and costs upon the defendant for having the margarine unlabelled, but dismissed the other charge.

Isaac Bowen, of 89, Gravel-lane, £5 and 12s. 6d. costs, for selling margarine without label.

Jane Jones, of 26, Newcomen-street, Boro' High-street, £5 and 12s. costs, for exposing margarine for sale without a label.

LARD.

At Wooler Petty Sessions, Northumberland, on the 4th inst., Thomas Steel, grocer, Lowick, was charged, under the Food and Drugs Act, with selling lard adulterated with about 28 per cent. of beef stearine, at Lowick, on the 26th of January last. Police-constable John Kennedy proved the case, and defendant was fined 2s. 6d. and costs.

Sarah Patrick, grocer, Lowick, was ordered to pay a fine of 2s. 6d. and costs for a similar offence. Police-constable Kennedy proved the case.

THE WARRANTY QUESTION.

At the Doncaster Borough Police-court, on the 10th inst., William Henry Priest, provision dealer, Catherine-street, was summoned for an alleged infringement of the Food and Drugs Act. Mr. Sugden (Town Clerk) appeared in support of the summons, and Mr. Baddiley defended. The Town Clerk said the facts as to the analyst's certificate were not denied, but the question of warranty would be raised. The Act provided, under Section 25, that if the defendant proved that he thought he purchased the article of the same nature, substance, and quality demanded, and had a written warranty, he might be discharged, but was liable to pay the costs. He had received due notice that this defence would be raised. Inspector Thompson deposed that he purchased a pound of lard and paid 6d. for it. Mr. Allen, of Sheffield, the analyst appointed by the Corporation, had a sample forwarded to him, and certified that it contained 4.4 per cent. of water, in addition to containing an admixture of beef stearine in

proportion of not less than 10 per cent. The beef stearine was explained to be an inferior kind of fat. Mr. Baddiley, in defence, said the lard was purchased from a firm at Blackburn, and it was invoiced "pure;" there was received from the firm an agreement to pay all costs and penalties in any action under the Food and Drugs Act and the Merchandise Marks Act. The firm had a very high reputation for their lard, and it was 2s. dearer in the market than what was received from other places. The defendant had never before received a complaint. The lard came from America, and might have received the admixture there. The Town Clerk said that, even if the defendant was discharged, there could be action brought against the party giving a false warranty. He maintained that there was an objection to the warranty, it being in print and not in writing. Mr. Baddiley contended that the warranty need not be in writing. It would be a farce to expect a firm doing so extensive a business to have their warranty always in writing. The magistrates held that the warranty was insufficient, and did not satisfy the requirements of the section of the Act. As this was the first case of the kind, the penalty would not be more than £1 and 10s. costs, and his was imposed for the protection of the public.

MUSTARD.

At Penarth Police-court, on the 10th inst. (before Mr. John Cory and Major Thornley), Henry Adams, Penarth, was charged by Inspector Rutter with selling adulterated mustard on the 9th of February last. Defendant said he seldom served in the shop, but in the case in question the mustard was sold as a mixture. Inspector Rutter said when he visited the shop he asked for mustard, but he did not know what was supplied to him was labelled "compound." The box was now produced, and the word "compound" appearing thereon the case for the prosecution was withdrawn.

COFFEE.

At Southwark, on the 6th inst., Frederick Woolgar, of Well-street, was summoned for selling adulterated coffee. The inspector's assistant said he purchased two ounces of coffee for which he paid 1½d. Inspector Thomas deposed that the analyst's certificate showed that the coffee contained 60 per cent. of chicory. A fine of £5 and 12s. 6d. costs was imposed.

Richard West, of Fream-street, Permdndsey, appeared to a summons taken out at the instance of Henry Thomas, inspector under the Food and Drugs Act, for the parish of Bermondsey, charging him with having sold, to the prejudice of the purchaser, adulterated coffee. Inspector Thomas said the coffee contained 40 per cent. of chicory. A fine of 40s. and costs was imposed.

At Knareborough Petty Sessions, on the 8th inst., Robert Colley, grocer, of Marton, was charged by Henry Gamble, of Harrgate, inspector of weights and measures, and also inspector under the Food and Drugs Act, with selling adulterated coffee on the 23rd of February last. Defendant pleaded guilty. Prosecutor stated that on the day named, he purchased 8oz. of coffee from the defendant for the purpose of having it analysed by the public analyst. He had since received the certificate from the analyst, who certified that the sample contained 50 parts of coffee and 50 parts of chicory. The Bench suggested that the defendant should be more careful in the future. If he sold anything as a mixture of chicory and coffee it should be specified as such. Under the circumstances they put on a light penalty of 10s. and costs.

On the 3rd inst. at the Leyland Petty Sessions, John Finch, grocer, of Penwortham, was summoned for offering for sale adulterated coffee. From the evidence it appears that an inspector visited the defendant's shop on the 15th ult., and bought four ounces of coffee. Defendant gave him overweight, and through this he had the article analysed. He found that the so-called coffee contained 45 per cent. of chicory. In answer to the charge defendant said he did not mix the coffee himself, but he bought it as genuine. Fined 20s. and costs.

At the Swansea County Police-court, on the 13th inst., much time was occupied in the hearing of a case brought against Evans, Hopkins, and Co., grocers, of Pontardulais, for the sale of adulterated coffee. The coffee sold was Lewis's dandelion coffee, a tinned mixture prepared by a Cardiff firm. The borough and county analyst reported that the mixture consisted of 72½ parts of coffee and 27½ parts of chicory, and that, therefore, there was no dandelion at all. For the defence Mr. Edmunds, of Cardiff, contended that coffee was mixed with taraxacum, or dandelion, and not chicory. Dr. Morgan, the county analyst, was called, and was prepared to swear that to the best of his knowledge the mixture was chicory. He admitted that the test of specific gravity was not alone to distinguish dandelion from chicory, for the roots when roasted were so exactly similar that analysts could not determine them. Mr. James Lewis was called, and said the mixture contained taraxacum or dandelion root and coffee. He personally superintended the preparation when it was put in the tins. As a chemist, he could say there was no difference between dandelion and chicory in their roasted state. The Bench decided to dismiss the case.

DILUTED BRANDY.

At West Powder Petty Sessions, on the 1st inst., John Borlase, of St. Allen, innkeeper, was summoned, under the Food and Drugs Act, for selling a pint of British brandy 16 degrees under proof to Superintendent Philp, an inspector under the said Act, on the 9th of March last, at Zelah. Defendant pleaded guilty, and Superintendent Philp having given evidence as to the taking of the samples, the following certificate of Mr. Benedict Kitto, F.I.C., F.G.S., London, was put in:—"I am of opinion that the same is 41 degrees under proof, which is 16 degrees more than is allowed by law. It is adulterated to this extent by the addition of water." Defendant was fined 10s. and costs.

WHISKY.

At the Leyland Petty Sessions, on the 3rd inst., William Sutton, landlord of the Fleece Inn, Penwortham, was charged with selling adulterated whisky. It appeared from the evidence of an Excise officer that he visited the defendant's house and purchased a pint of whisky from the defendant's daughter, paying 2s. 4d. for it. He afterwards had it examined by an analyst, who stated that it contained 8½ per cent. excess of water beyond the allotted standard. Fined 40s. and costs, in default, one month hard labour.

At Carnarvon on the 3rd inst., Hugh Roberts, Garnons Arms, was summoned at the instance of the police for selling to Sergeant Harries a pint of whisky which according to the analyst's certificate, contained 21½ degrees of water above the quantity allowed by the law. Mr. Lloyd Carter, who defended, said that the defendant had acted innocently on the advice of a friend in the trade. What he had done was commendable from a teetotal point of view, but at the same time he had no doubt broken the law. (Laughter.) He undertook that nothing of the kind would again occur. This being the defendant's first offence, he was only fined 10s. and costs. There was a similar charge against Evan Jones, Black Lion Vaults, who admitted the offence, but pleaded that it was his wife's doing. The Clerk: But you, as the husband, are responsible for what she does. The defendant: Yes, that is often the case, more's the pity. (Laughter.) Jones was also fined 10s. and costs.

RUM.

At the Town Hall, Pontefract, on the 10th inst., Louisa Leake, landlady of the Dolphin Inn, Horseshair, Pontefract, was summoned, on two informations, by Mr. W. H. Wilson, an inspector, under the Food and Drugs Act, for having sold a pint of rum 39½ degrees under proof, and a pint of gin 33½ degrees under proof. Mr. C. E. S. Lowden defended, and on behalf of his client pleaded guilty, and in mitigation showed that Mrs. Leake was not at home when the spirits were watered. Fined 10s., and costs in each case.

At the South-Western Police-court, London, on the 12th inst., a publican, named Alfred Page, formerly landlord of the Nine Elms tavern, Battersea, was summoned by the Vestry of St. Mary, Battersea, for selling rum under proof. James W. Sullivan, the inspector, having proved the purchase of a sample of rum at the Nine Elms Tavern in February last, the defendant who had sold his business since, said there was a notice hanging in the bar stating "All spirits diluted according to price." He called his wife who stated that the notice was hung in a frame above the bar-parlour door. The inspector was questioned, and said, although he searched for a notice he could not find one. Mr. W. W. Young, who supported the summons, suggested an adjournment to enable him to call a witness to prove that there was no notice in the bar. Mr. Haden Corser observed that it was the duty of the defendant to give notice of the dilution. It was not sufficient to hang the notice; it should be brought to the notice of customers. Mr. Young concurred, and said a learned Judge had held that a notice should be duly and sufficiently brought to the notice of people. He (Mr. Young) added that if a statement was placed in a conspicuous place in the bar he would not recommend a summons. Mr. Corser said Mr. Young would be acting wisely. He did not think a notice hanging in the bar was sufficient, and imposed a penalty of 20s., with 2s. costs.

THE WARRANTY AGAIN.

On the 28th ult. at Westminster Police-court, Mr. Ricketts, solicitor, defending Mr. E. Handsley who was charged with vending in Pimlico milk to which 11 per cent., 14 per cent., and 8 per cent. of water had been added, stated that defendant dealt with 500 farmers, and did all in his power to obtain pure milk, receiving a written warranty with each consignment. Mr. Handsley sent over a thousand samples to distinguished analysts as the lactometer kept at all the districts could not be trusted. Mr. Arthur Handsley, manager to the defendant, deposed that every precaution was taken to keep the milk pure. Cross-examined: The defendant was summoned last month for a similar offence by the Hammersmith Vestry, and met the summons with a warranty. The milk in that case did not come from the same farmer as the milk in the present one. Re-examined: The milk from Mr. Fane, whose milk had been found on this occasion adulterated, had always been pure before. A number of witnesses gave evidence as to how every can of milk was sampled at the depots by the lactometers, and records kept as to the places they were sent to. Mr. Sheil remarked that Mr. Handsley he thought, had taken every possible precaution. He (his Worship) did not see how greater care could be taken. No one could conduct his business more honestly than Mr. Handsley did, and the summons would be dismissed. Mr. Ricketts asked for costs, and deprecated the over-zealous action of the Vestry in trying to obtain a conviction at any price. Mr. Sheil granted £3 3s. costs against the Vestry, but expressed the opinion that the Vestry acted wisely in taking out these summons. Mr. Ricketts: Of course, sir, the more they take out the better it will be for our firm. Mr. Gill asked for a summons against the original consignor. Mr. Sheil, while admitting that he had the power to grant one, thought Mr. Gill had better apply for it some other time.

PUBLIC HEALTH NOTES.

Dr. Alfred Harris, medical officer of health for Islington, in his report for February, says that during the month 32 samples of milk were taken by the inspectors, 4 of which, or 12·5 per cent., were found to be adulterated. One of these had 60 per cent., another 25 per cent., and a third 20 per cent. of the original fat abstracted, and one contained 18 per cent. of added water. Recollecting that the standard by which these are judged is absurdly low, and therefore that the skimmings and adulterations were very much greater than the analyses would lead one to suppose, it cannot be thought the fines, varying from one pound to ten shillings, were particularly severe. Adulteration pays milk vendors, even though they be fined occasionally, because, as a rule, the fines inflicted are not nearly proportionate to the amount of adulteration, or adequate to the enormity of the offence. Milk adulteration of any kind is robbery, and robbery of the very worst description, because it is a staple article of food, and therefore any abstraction of its nutritive qualities deprives many hard workers, males and females, and also young children, who for the most part live on it, of that nutrition which is so requisite to sustain their lives. It is certainly very hard in the case of the milk with added water, to have to pay one-halfpenny for a quarter of a pint of water. Just think of it! water sold at the rate of one shilling and fourpence per gallon, and a fine of ten shillings inflicted!

Dr. Alfred Harris says that in the month the new cases of infectious diseases notified were 230 in number, and are equal to an annual rate of 9·2 per 1,000. This return is 16 less than that of January, but 78 in excess of the corresponding four weeks of last year, when the sickness rate was only 6·1. Scarlet Fever accounts for 65 of these 78 cases, Small-pox for 7, Eateric Fever for 10, Erysipelas for 6, and Continued Fever for 2. On the other hand, Diphtheria was less by 6, Membranous Croup by 2, and Puerperal Fever by 4. *Small Pox* was reported on 10 occasions, and of the patients, 5 were vaccinated, 1 un-vaccinated and the condition of 4 was unknown. Altogether 20 cases have been reported this year. It is a matter of much regret that the origin of the disease in many of these could not be ascertained, but several were known to have slept at refuges and similar institutions. There can be no question that the movement of tramps throughout the district, and throughout London, is a fruitful cause of the spread of the disease. Every case of Small Pox, when notified, was at once made known to the vaccination officers, so that no time was lost in impressing on the persons residing on the premises, the necessity of being vaccinated or re-vaccinated. At such a time as this when the disease is clearly making headway, it is absolutely essential to bring before the public the importance of these precautions, because, without doubt, they are the only means available for warding off this disease,

Mr. Duncan Macarthur, County Sanitary Inspector, in his report on the sanitary condition of Shetland in 1892, gives some account of the miserable condition of the people of that remote region. The sanitary condition of the County is not as bad as it was, but apparently there is still great room for improvement. He says: Marked improvement has been made on the dwelling-houses. Internal communication between byres and dwelling houses—where the byres directly adjoin the houses,—is not so frequently met with. In most cases the byre is built on the end of the house, but in many instances it is attached either to the back or front and frequently stands on a higher level than the dwelling house. The byres being only cleaned out once a year, and being generally half-filled with semi-solid manure from which organic matter easily percolates through the rubble wall, which is common to both, and being neither cemented nor limed, consequently renders the dwelling house damp and unhealthy. The practice of keeping farm stock in the dwelling-houses is not so common as formerly, although some still have the objectionable practice. Overcrowding is still very bad in many districts. While visiting the island of Unst, I inspected a house consisting of two rooms, a but and ben only. The ben end was used as the sleeping apartment, and accommodated eight people in three beds. Another case in the island of Yell, where the house was of the same dimensions, accommodated nine people, three being affected with typhoid fever.

The dwelling houses of the paupers in many cases are miserable huts—great numbers of them being built of turf, and are insufficiently lighted and ventilated.

They are as commendably energetic in carrying out the work of tracking infectious disease in Ceylon as we are in England. A fortnight ago Mr. Edmund Ebert, employed in the Forest Department, was charged by Mr. Inspector Akbar before the Colombo Municipal Court with concealing a case of smallpox

that occurred at his house, Dhobies Lane, Pettah. On the case being discovered by Police Sergeant James, who resides in the adjoining house, the patient was sent to Hospital. On the evidence adduced for the prosecution, the accused was found guilty, and sentenced to pay a fine of twenty rupees.

We learn from the *South Wales Daily News* that a special committee of the Glamorganshire County Council sat in private at Cardiff last week, and had laid before them certain representations by Councillor Richard Morris as to the condition of the Rhondda, both in respect to drainage and water supply, (or rather lack of water supply), and also in regard to the obstruction of the river. It is alleged that at Porth and Dinas a large quantity of debris is being thrown into the river, blocking the water course to such an extent that in the event of heavy rain there is danger of the residential area being flooded. It is further stated that in Llwynypia and Clydach Vale, rubbish is being tipped into the brook without restriction, and is being carried down to the Rhondda river. At Llwynypia there are 200 houses having what are called ash closets, which are supposed to be cleaned once a fortnight by the scavengers, but one observer reports having visited the place and having found the filth from the scavengers cart had been dropped about on the public roadway.

The water supply is sadly deficient, the water company not supplying water except between eight and ten in the morning. In other parts of the district water is obtainable only from 6 p.m. to 6 a.m.—none during the daytime. At Gelli there have been fifteen cases of typhoid fever, and on the 7th of April three patients had recovered and twelve remained under treatment. It was reported that an open drain carries the sewage of about 250 houses into the river, and that the smell from the drain is very obnoxious. With regard to the water supply at Gelli, it was stated that both there and at Ton it is only from 10 a.m. until 12 noon, whilst in Llwynypia and Tonypany it is from 8 until 10 a.m. Investigation is to be made also, into an allegation that water is taken in below the filtering bed.

Cadoxton, near Cardiff, is anxious to be constituted a separate Port Sanitary Authority, having jurisdiction from Lavernock Point to the Nash. A Local Government Board inquiry was held at Cadoxton on the 11th inst., when evidence was given. The chief point was whether the eastern portion of Sully Island should be included in the area of the proposed new authority. After some discussion it was decided that the rural sanitary authority should class together Sully, St. Athan's, Penmark and Porthkerry, and pay according to the ratable value towards the charges of the port sanitary authority if the local board decided to give the Barry and Cadoxton Local Board control over that portion west of Barry. The inquiry then concluded, and the result will be declared in due course.

Dr. Fosbrooke, medical officer of health to the Pershore Rural Sanitary authority, in his first annual report, points out a serious evil in the district, arising out of the somewhat primitive sanitary conditions of that district. He says:—

“The removal of excrementitious nuisances are of daily occurrence. The district being, with the exception of Pershore, entirely rural, midden closets abound. Most of these closets are constructed on pernicious principles, and I have advised your inspector for the future, when causing alterations to be made, to see that as far as practicable the lowest parts of the privy vaults are above ground level. I append a design for a privy and an ashpit which an extended practical experience enables me most emphatically to recommend; and as such closets are not more expensive than the insanitary ones with deep vaults, I trust you will approve them and definitely order their adoption wherever improvements are carried out at your instigation.

The Sheffield Town Council, on the 12th inst., resolved on the recommendation of the Health Committee to sweep away a long-condemned plague spot in the borough. It was decided to pull down the houses and other premises, under the Housing of the Working Classes Act (1890), in an area surrounded by Townhead-street, Campo-lane, Tenter-street, Hawley-lane, Silver-street-head, and Lee-croft. A plan attached to the minutes showed that the area had been divided into four sub-areas. Area No. 1 contains a population of 398, covers 7,030 square yards, the density is fixed at 274 persons per acre, and the death rate is averaged at 23·4. Area No. 2 has a population of 343, covers 6,550 square yards, density of 254 persons per acre, and has a death rate of 34·0. Area No. 3 has a population of 277, covers an area of 4,276 square yards, density 314 persons per acre, and the death rate is averaged at 31·8. Area No. 4 contains a population of 203, covers an area of 3,410 square yards, density 290 persons per acre, and has a death rate of 39·4. The total population of the whole area is 1,220, the area covers 21,266 square yards, the density is 278 persons per acre, and the death rate is averaged at 31·0.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended April 15, 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities.	
		1892.	1893.
Animals living:—			
Oxen, bulls, cows and calves	.. Number	9,290 ..	2,871
Sheep and lambs	.. ..	594 ..	350
Swine	.. ..	— ..	—
Fresh meat:—			
Beef	.. .. Cwts.	40,912 ..	19,453
Mutton	.. ..	3,904 ..	30,706
Pork	.. ..	1,075 ..	2,101
Salted or preserved meat:—			
Bacon	.. ..	81,750 ..	36,768
Beef	.. ..	4,608 ..	4,425
Hams	.. ..	21,800 ..	9,500
Pork	.. ..	3,661 ..	2,706
Meat unenumerated, salted and fresh	.. ..	3,559 ..	6,025
Meat presvd., otherwise than by saltg.	.. ..	17,986 ..	8,127
Dairy produce and substitutes:—			
Butter	.. ..	40,492 ..	44,499
Margarine	.. ..	24,745 ..	23,183
Cheese	.. ..	9,630 ..	16,431
Condensed milk	.. ..	5,003 ..	8,754
Eggs	.. .. Grt. Hundr.	254,457 ..	185,237
Poultry and game	.. .. Value £	3,456 ..	4,102
Rabbits, dead (not tinned)	.. .. Cwts.	903 ..	579
Lard	.. ..	27,570 ..	9,270
Corn, grain, meal and flour:—			
Wheat	.. ..	880,945 ..	764,946
Wheat meal and flour	.. ..	325,073 ..	460,581
Barley	.. ..	117,251 ..	283,484
Oats	.. ..	179,286 ..	247,278
Peas	.. ..	20,874 ..	8,602
Beans	.. ..	44,132 ..	88,881
Maize or Indian corn	.. ..	544,771 ..	638,250
Fruit, Raw:—			
Apples	.. .. Bush.	32,290 ..	46,546
Oranges	.. ..	155,830 ..	120,441
Lemons	.. ..	— ..	29,509
Cherries	.. ..	— ..	—
Plums	.. ..	— ..	—
Pears	.. ..	275 ..	194
Grapes	.. ..	207 ..	411
Unenumerated	.. ..	1,624 ..	7,990
Hops	.. .. Cwts.	1,148 ..	691
Vegetables:—			
Onions, raw	.. .. Bush.	93,733 ..	41,960
Potatoes	.. .. Cwts.	16,491 ..	31,251
Unenumerated	.. .. Value £	14,475 ..	20,777

* Not separated in 1892.

Statistical Office, Custom House, } T. J. PITTAR.
London, April 17th, 1893.

EXCERPTS FROM CONSULAR REPORTS.

BEER AND ALE.

ARGENTINE REPUBLIC.—The imports of foreign beers are now very small; home-made brew succeeded in monopolizing the market almost entirely.—*Austro-Hungarian Consulate at Buenos Ayres.*

AUSTRALIA.—A large quantity of lager-beer is drunk here, "Brand's" and "Elberfeld" being the most popular. *Austro-Hungarian Consulate at Adelaide.*

CONDENSED MILK.

CHINA.—The sale of condensed milk has again increased to a large extent; the imports in 1890 and 1891 were 1,474 and 2,180 dozen tons respectively. The import trade in this article has a wide future before it in the middle and southern Chinese ports.—*German Official Report from Swatow.*

LIME JUICE.

AFRICA: What is lime juice? In the month of February of this year the customs authorities of the city decided that lime juice was a "distilled drink," and it has consequently been classified as a spirit to pay a duty of 7s. 2½d. per gallon, instead of a 3 per cent. *ad valorem* duty as heretofore.—*British Consul at Lorenzo Marques, January 10, 1893.*

CORRESPONDENCE.

To the Editor of FOOD AND SANITATION.

In reference to Mr. Johnstone's letter in the *Grocer*, the following newspaper cuttings (from a Cornish paper some years old) may be of interest to you. I keep the originals here, but of course they are open for your inspection:—

Paragraph 1: "A BOROUGH ANALYST AT LAST.

"The whole population of West Cornwall has been much amused during the past five or six years at the persistence with which the St. Ives Town Council has shelved the subject of the appointment of a borough analyst. They did not act in an apparently contumacious manner out of any disrespect for the Local Government Board or the requirements of the law, but because they denied that the financial position of the borough would warrant them in spending the money on the holder of what they all felt would be virtually a sinecure office. But the Local Government Board troubled them with "much writing," and they became wearied in the struggle against the inevitable. They therefore proceeded on Monday to the appointment of a borough analyst, and were more fortunate in one application than the most sanguine among them could have imagined. They have got a gentleman who pressed himself into the service, and who undertakes to carry out all the duties 'to the satisfaction of the Corporation' without fee or reward. Such kindness nearly overpowered one or two of the members, but Mr. Alderman Berriman was cruel enough to protest against the appointment, declaring that he never knew any man so eager to work for nothing unless he saw 'some good thing' looming in the distance. What-ever did the Alderman mean?"

Paragraph 2.

"APPOINTMENT OF A BOROUGH ANALYST.

"There were two applications for the post of borough analyst in response to the letter of the Town Clerk. Mr. J. J. Beringer said he would accept the office on the usual terms (a guinea a quarter) and customary fees, and Dr. Johnstone offered to attend to the duties gratuitously. The appointment is an annual one, and Dr. Johnstone was duly elected.

Paragraph 3, a year later.

"FACTS AND FANCIES.

"The truth of the old adage 'Penny wise and pound foolish, has just been illustrated in the experience of the St. Ives Town Council. They last year declined to appoint Mr. J. J. Beringer as borough analyst, because he demanded one guinea per quarter as remuneration, preferring rather a London gentleman, who obligingly accepted office without salary, and agreed to conduct three analyses without fee or reward. Unfortunately the Corporation overstepped the mark, and submitted Mr. Johnstone one more article than he undertook to analyse for nothing. They have now the interesting duty of considering an account of twelve guineas for services rendered."

I wonder whether the Town Councils of Dunstable and King's Lynn employ Dr. Johnstone on the same advantageous terms as does St. Ives?

Yours, &c.

VERAX.

REVIEW.

Model Answers to Questions for Examination by Sanitary Inspectors. Compiled by the Editor of the *Sanitary Record*, 2, Lexham-gardens, London. Price 2s.

The model answers are to questions set by the Sanitary Institute and the Sanitary Association of Scotland during the past five years, and they embody in a terse, accurate form well nigh all the matters in which a sanitary inspector should be proficient. The book is well arranged, and will be found of the greatest benefit. We can cordially recommend it to our readers.

NORFOLK COUNTY COUNCIL.

THE COLLECTION OF SAMPLES.

At the last meeting of the County Council, the County Analyst reported that during the quarter he had analysed thirty-two samples, of which six were adulterated.

Mr. Sapwell protested against the absurd system by which policemen in uniform were sent round to collect samples.

The Chairman—That was altered at the last committee.

Mr. Sapwell—No, they are going to send policemen all the same, but policemen from another division. This is no use, for there was no disguising a policeman wearing county boots.

Sir Lawrence Jones said he did not know what better persons to collect the samples Mr. Sapwell could suggest. The present system was not an ideal one, but there were policemen all over the divisions, and they could be employed to take the samples at a small expense. He moved the re-appointment of Mr. Sutton as County Analyst.

This was seconded by Mr. Robins Cook, and carried.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT-COFFEE COMPANY.

(Proprietors, KRIKORIAN BROS.)

MONUMENT BUILDINGS, LONDON, E.C.

THE SANITARY INSTITUTE OF GREAT BRITAIN has always given the Highest Awards, when tested against other so-called Disinfectants, to

Calvert's No. 5 Carbolic,

which is of the quality adopted as "Standard" by the British and German Governments after bacteriological tests. Unscrupulous statements that other Disinfectants are superior to genuine Carbolic Acid should be treated with the distrust they deserve. Sold by most Chemists in 8 and 16 oz. bottles, at 1s. and 1s. 6d. each; $\frac{1}{4}$, $\frac{1}{2}$, and 1 gallon tins, 2s. 6d., 4s., and 6s. 6d. each; or larger lots at rates on application to

F. C. CALVERT & CO., MANCHESTER.

60 MEDALS, &C.

IMPORTANT NOTICE TO OUR READERS.

On April 22nd, we changed the title of *FOOD, DRUGS, AND DRINK* to

Food & Sanitation.

We take this opportunity of thanking the Medical officers of Health, Public Analysts, Food and Drug Inspectors, Sanitary Inspectors, Weights and Measures Inspectors, grocers and members of local authorities who have written us commending our efforts, and we hope that the improvements we contemplate, will make the paper still more valuable to our subscribers and the public. We would be glad if Medical Officers and others sending us reports would, where possible, send them in duplicate.

SPECIAL NOTICE TO OUR READERS.

We would be pleased if readers of this journal, in enquiring for samples of any of the preparations advertised in it, would mention the name of the journal in their enquiry.

SANITARY AND FOOD AND DRUGS INSPECTORS' DIFFICULTIES.

Many of our subscribers having pointed out to us how useful a column for questions and answers would be, we have pleasure in informing our readers that we have arranged with eminent sanitary, analytical, and legal experts, who will be pleased to answer and advise gratis through this column, upon any questions of procedure or difficulties on which information is required.

DOVER AND THE FOOD AND DRUGS ACT.

The Dover City Fathers have lively wits. The *Dover Standard* April 22nd, says:—

"A letter was received from the Clerk to the Islington Vestry requesting the assistance of the Dover Town Council in amending the Acts at present before Parliament, so that they will affect the wholesale dealers as well as the retailers.

Councillor Ayers said they had a public analyst whose report was always *nil*, and he would move that they reply to the letter that the Food and Drugs Act is a dead letter in Dover (laughter).

It was agreed to simply acknowledge the letter.

We give this thievish encouraging decision as wide a prominence as we can, that other vestries, town councils or county councils who protect the public from fraud, may know the character of Dover.

Food and Sanitation.

SATURDAY, APRIL 29, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

A SOMERSET HOUSE CERTIFICATE NOT EVIDENCE.

In another column we publish a letter from Mr. Otto Hehner, past president of the Society of Public Analysts. Mr. Hehner's communication raises a question of paramount importance to food and drugs inspectors, public analysts, and local authorities, who prosecute under the Sale of Food and Drugs Acts.

The unscientific, worthless nature of the Somerset House analyses have been so thoroughly exposed by us, that the mass of our readers can have no hesitation in regarding the certificates coming from the referees at Somerset House, as beneath contempt, but magistrates can hardly be expected to be thoroughly conversant with the scientific incompetence of the department; and as official names and titles have a certain awe-inspiring importance, there is little wonder that a certificate bearing the names of three Government scientists, with an imposing F.R.S. after one of the names, should be taken as of greater value than that of an expert food analyst of real scientific capacity. It has hitherto, to the public injury and the encouragement of fraud, been the custom to accept the certificate of the Somerset House chemists, not only as evidence, but as evidence having a supreme importance over that of the public analyst or even of witnesses who may have seen the adulteration practiced. Mr. Hehner's letter shows that this practice of accepting a Somerset House certificate as evidence is not warranted by the Acts of Parliament; and a legal expert further informs us that the powers of Somerset House referees are plainly, by the sections of the Act cited by Mr. Hehner, limited to the giving of an *opinion*, and that persons prosecuting under the Acts, be they Food and Drugs Act Inspectors, or local authorities, are within their right in objecting entirely to the introduction of a Somerset House certificate as evidence, unless the chemists giving the certificate are *present in person* to support and defend their certificates. What we wish Food and Drugs Act Inspectors and local authorities to realise, is that their duty to the public obliges them to see that the Acts to repress adulteration are fairly and equitably administered. The retailer's character and business are to him his livelihood, and he should be protected against the possibility of mistakes on the part of public analysts or their so-called referees. Just, however, as there are unscrupulous dealers who drive a "cut-throat" business by deliberately vending butter and the like adulterated to the standard Somerset House will in appeal cases certify to be genuine, so there are public analysts who disgrace their profession. Some analysts even rival in incompetence the Somerset House referees, whilst others are notoriously corrupt. In grocers trade journals it is asserted that we hold a brief for the public analysts. The assertion is absurd and mendacious. We hold our brief for the protection of the public and of the self-respecting retailer. We are the "lay champions," not as one of the worst of the adulterating manufacturer's organs says, "of the analysts," but of the mass of the public who are plundered by the prevalence of fraud in food-stuffs, of the retail grocers who are the victims of the artful swindles of unscrupulous manufacturers or wholesale dealers, and for whom an honourable livelihood is being made impossible by the fact that co-operative societies swindle poor operatives of £40,000 annually by excess water in butter, or that gigantic advertising traders, like Lipton, may sell American produce as Irish, and when punished have their fines remitted by foolish, unpatriotic green-horns of Lord Lieutenants. We hold our brief for the 250,000 hopeless and homeless labourers whom free-fraud in foreign foodstuffs, has in ten years driven from the land to towns, to reduce the already low wages of labourers, and whose misery brings verdicts from coroners' juries of "death by starvation, labour wars, as at Hull, increased rate," and a condition of things that unless our legislators find a remedy for it threatens to bring us by irresistible steps to social chaos. It

is because our own inquiries have shown us how largely the fraud encouraging standards of Somerset House have contributed to this result, that we have supported with all our strength the proposals to secure a more competent, more impartial, and more far-seeing court of appeal in adulteration cases. We have no private hostility to the Somerset House chemists. Our strictures and exposures have not been made from animus to any member of the Somerset House staff, for we know none of them, and if we did, we would be as contemptible as the adulterating manufacturers' organs who criticise us if we used the columns of our journal for the gratification of personal vindictiveness. Such being the case, and attacking as we do the department and the system—not the individuals—we would once and for all disclaim the assertion that we are in any way connected with the Society of Public Analysts, or in any degree whatever their mouthpiece. Had we evidence that the Society of Public Analysts were acting against the welfare of the public, or seeking to deal unjustly with the rights of any class of traders, we should have no hesitation in criticising them as fully as we have criticised their referees. In this instance we take our stand upon the bed rock of the law. Clearly the law does not give the importance to the Somerset House certificate that has hitherto been wrongly supposed to attach to it. A study of the Act shows the Somerset House certificate is only an *opinion*, which justices may take for what it is worth, and that it is not evidence over-riding that of the public analyst, nor can it be received as evidence unless the Somerset House chemists appear in person to support it, and endure the ordeal of cross-examination on their certificates should Food and Drugs inspectors or solicitors desire to subject them to such cross-examination. Somerset House has been too long a "Veiled prophet." It would be well for the public were the veil to be raised from the mysteries of its analyses, and its Mahdi's shown to be what they really are. We venture to say that if they faced one cross-examination as to the value of their certificates, the exposure would be such that they would resign *en bloc* rather than endure another. Mr. Hehner's letter has shown that Food and Drugs' inspectors and local authorities have the power, and it remains only to be seen who will do the public a service by demanding the presence in court of Somerset House referees to substantiate and prove the accuracy and value of their certificates. They might be asked to explain the analytical processes by which the specially prepared samples of coffee and chicory mixtures made up by the Birkenhead Corporation some years ago, which contained 10 per cent., 30 per cent., and 37 per cent. of chicory, were certified by them to contain 2½ per cent., 35 per cent., and 48 per cent. They might also explain how they certify one week that butter is genuine and the next week certify that the same butter contains 70 per cent. of foreign fat. They might also explain why they pretend to be able to analyse decomposed milk. Brought thus before magistrates, and confronted by scientists whose certificates they ignorantly presume to sit in judgment upon, "their banner, the rallying sign of fraud," would no longer wave over the Hamburg butter-mixing-thief or the London separated-milk-mixing swindler. The veil would be lifted, and like Mokanna their power would be ended. The knaves that minister to the fraudulent manufacturers who adulate Somerset House would find their occupation gone; honest traders would thrive; the public would benefit, and English agriculture once more rear its head in prosperity; none of which things can be, whilst we have state supported scientific incompetence as referees under the Food and Drugs Acts. The Food and Drugs inspector or local authority who will, in the next case of a Somerset House certificate, exercise the right the Act confers, of putting the Somerset House chemists in the box, will do a great public service, and the sooner it is done the better.

THE QUEER LARD CASE.

In our last issue we reported the case of Mr. Walter Willson, Mayor of Gat-shead, prosecuted by the Durham County Council for selling adulterated lard. Mr. Willson alleged that the lard was purchased from Messrs. N. Kilvert and Sons; and Messrs. Kilvert's solicitor, Mr. Macdonald, as stoutly denied that the lard was supplied by his clients. Mr. Willson now writes that he proved conclusively the lard came from N. Kilvert and Sons, and that the bench said they would adjourn the case for a fortnight to discuss the question whether the word "pure" underlined in red ink on the invoice could be accepted as a legal warranty of purity, and that the bench hoped to "saddle the right horse." Mr. Stock's analysis showed the lard to contain 7 per cent. of beef stearine, and if the right horse, be it Messrs. Kilvert, Mr. Willson, or some other person be saddled, it will be interesting to know if the matter will be let rest with the saddling, or will the really guilty person be prosecuted further now that the Bench have held the invoice to constitute a warranty, and have dismissed the case on Mr. Willson paying costs £4 9s. 6d.?

LONDON CHAMBER OF COMMERCE AND ADULTERATION.

THE Vigilance Committee of the produce section of the London Chamber of Commerce met six times in the course of the past year, according to their report to the Chamber, but that the provision trade section has done anything of a real nature to check the adulteration of butter, of which they complain so much, is not evident. Their proposition that inspectors under the Food and Drugs Act should be appointed by, and be under the control of, the County Council, is one we should feel inclined to support, had it a rider that both appointments and dismissals should be subject to sanction by the Local Government Board; but it has not. To perform their duty satisfactorily, the inspectors of Food and Drugs or the sanitary inspector ought to be able to proceed against his employers of the County Council or vestry, as well as against dealers who do not belong to such governing bodies. There is abundant evidence that, in many districts, if an inspector were to do so now, his action would bring upon him the swift punishment of dismissal. Further, vestries innumerable adopt the practice of deciding whether prosecutions for adulteration shall take place or not; and however flagrant the case, or far reaching the fraud, "warnings" in place of prosecution are given when the offender is a vestryman or the friend of one. It is questionable, however, if the produce section really takes any serious interest in adulteration and its suppression. Such an important question as the protection of the trade from adulteration frauds might naturally be supposed to engage the attention of the Grocer's Company, but that guzzling, gorging imposture is as satisfied to misuse public money as the produce section of the Chamber of Commerce is to allow it, without protest, to continue its shameful existence, and altogether it is a case of what is everybody's business being nobody's.

FRAUD IN THE BACON TRADE.

Our exposures as to the manner in which English and Irish pig curing industries are being injured by free fraud are corroborated by the following circular issued by Mr. Torkington, a leading Manchester grocer and provision dealer. Mr. Torkington says:—

Important to the Public.

A system of fraud has for some time past been practised, with more or less success, upon the public by provision dealers. I refer to the practice of selling American bacon for Irish and English Wiltshire cut bacon. At no period has this fraud been practised so boldly as at the present time. The high prices charged for Irish and English bacon have made the genuine article to become almost a luxury upon the breakfast table; but this is no excuse for adopting a method of deceiving the purchasers, who, when they see a ticket stuck into hams or sides of bacon, bearing the words "Real Irish," or "Genuine Wiltshire," buy it in good faith, expecting (and rightly so) that they are getting the genuine article they are paying for. I believe that Salford and district has been quite overrun with this kind of fraud. This is not only unfair to the English and Irish curers, but also to their customers who retail the genuine article. This offence is punishable by law under the Merchandise Marks Act. Fortunes have been made by this fraud, and fortunes are still being made by the same illegitimate means. Every article ought to be sold for what it is, and then no one will have reason to complain. I sell English, Irish, Danish, and American bacon and hams, and I sell every kind for what it really is. Many who are thought to be good-class traders use such tickets as "Finest Wiltshire," "Genuine English," "Real Irish," or some such words upon them, although they have nothing but American bacon in their shops. It is manifestly to the interest of the public to protect and support every honest trader.

A DAIRY COMPANY FINED AT NOTTINGHAM.

SOMERSET HOUSE MENDS ITS HAND.

ALBERT COWLEY, local manager of the Farmers' and Cleveland Dairy Company at Hucknall Torkard, was charged at the Nottingham Shire Hall on the 22nd inst. with selling to Inspector Crabtree a pint of milk deficient in cream to the extent of 10 per cent., the milk, therefore, not being of the nature, substance, and quality of the article demanded, which was "new milk."—Mr. Bottrill (from the office of Messrs. Wells and Hind) appeared on behalf of the Notts County Council, the prosecuting authority, and Mr. E. H. Fraser for the defendant.—Mr. Bottrill stated the facts of the case as follows:—On Sunday, March 19, Mr. Crabtree, sub-inspector of weights and measures under the Notts County Council, was at Hucknall Torkard. He saw a boy in charge of a milk barrow, which he said was the

property of the dairy for which his father was local manager. The inspector asked for a pint of new milk, with which the boy supplied him from a large tankard. The price paid was 1½d. When he received the milk Inspector Crabtree proceeded to divide it into three portions, telling the boy that he had bought it for the purpose of having an analysis made, and handing him one of the portions, sealed up. Another portion of the milk was forwarded to Mr. Otto Hehner, of London, public analyst to the county of Nottingham. In reporting the result of his analysis Mr. Hehner certified that the milk had been deprived of ten per cent. of the cream which it would naturally contain. The milk at the time the analysis was made was quite fresh, and had undergone no chemical change.

Mr. Fraser reminded the bench that a third sample of milk had, by their order, been sent to London and analysed by the Government analyst at Somerset House. What the result of that analysis was he did not know, but he applied at least that it might be put in to contradict or to support the analysis just read.—After deliberation, the magistrates decided to hear the case, and then, if they thought fit, to call on their clerk, Mr. Raven, to produce the certificate of the other analysis.—Mr. Bottrill objected that this analysis could not justly be put in, unless the defendant had in some way offered evidence in dispute of Mr. Hehner's analysis.—Mr. Fraser, on the contrary, contended that this showed a disposition to secure a technical conviction, regardless of its justice. As a matter of fact it was part of the defence to controvert Mr. Hehner's analysis. The company, whose servant the defendant was, had entered into an agreement with a Mr. Bullock, a farmer, near Derby, to supply their various branches in the neighbourhood of Nottingham, including Hucknall, with milk which he was required to certify was pure and of natural strength and quality. The consignment from which the milk in question was taken was supplied in the manner described. Consequently the defendant, who sold the milk in good faith just as he received it was not morally responsible for the deficiency, and it could not be alleged therefore that he had tried to defraud his employers. This, Mr. Fraser submitted, should relieve the defendant from the legal consequences of this technical offence. As regarded an analysis of the milk on behalf of the defendant, such an analysis had been made by the analyst of the company at its headquarters at Middlesbrough, Yorkshire. The certificate of Mr. Hehner was therefore in dispute, and on that, Mr. Fraser said, he applied that the Government analysis from Somerset House might be put in.—The Magistrates admitted the certificate, which stated that the milk was deficient in fat (a constituent of cream) to the extent of not less than five per cent.—Mr. Fraser said he would accept the Government analysis, but he wished to point out that the standard of Mr. Hehner was higher than the standard of the Government analysts, and that judged by the latter analysis the milk in question was infinitesimally deficient in cream. The case, however, now stood on the validity of the agreement between the Cleveland Dairy Company and the Purveyor of the milk.—Defendant was called, and he asserted that he sold the milk in just the same condition as it was when he received it.—The agreement alluded to was put in evidence, and proved by Mr. Howitt, district manager for the company, stationed at Nottingham.—Mr. Bottrill contended that the defendant could not have the benefit of Mr. Bullock's warranty that the milk was pure, because he was not the actual purchaser from Mr. Bullock, but only the servant of the purchasing company.—Mr. Fraser said he had never relied on the warranty as an absolute protection for the defendant; he merely introduced it as a reason why the magistrates should let him off with the very smallest possible penalty. Had the inspector summoned the company itself he would have been able to put the warranty in as a complete defence.—The Magistrates retired to consider their decision. On their return into court, Mr. Wright said there was no doubt someone had tampered with this milk. But having carefully considered all the circumstances of the case, the Bench did not think it a very aggravated one as far as the defendant was concerned, and they thought it would be met by the payment of a fine of 30s.—The money, together with the costs of the Government analysis and other expenses, was paid by Mr. Howitt on behalf of the company.

[In reference to the case we have applied to Mr. Hehner to furnish us the results of his analysis, which he gives as follows:

Total solids	11.18
Fat, by Adam's process	2.77
Ditto calculated	2.84
Solids not fat	8.41
Specific gravity	1.0314

It follows, that the Somerset House chemists have taken 3 per cent. as their limit, and that they must have found 2.85 per cent. of fat in the sample. We congratulate Dr. Bell upon the progress which he is making in milk analysis, and upon the fact that he has at last thrown over-board his famous series of analyses to which he has clung so many years in spite of the protests of public analysts. At last the limit adopted by the Society of Public Analysts is thus officially accepted and vindicated. Public analysts, inspectors and milk-vendors should bear this in mind and act accordingly. Compare with this spirited action of the Notts County Council and their analyst, the miserable attitude of the Glasgow analysts, which we reported some time ago, one of the public analysts of the second city in the Kingdom declaring 1.9, the other 2.5 per cent. of fat to be the limit below which he would condemn milk as skimmed, and the baneful and demoralising influence of Somerset House in the past can be understood and appreciated.—THE EDITORS.]

OUR LOOKING GLASS.

Daily Chronicle, April 24th.

"Our contemporary, *Food and Sanitation*, continues its crusade against adulteration with unabated vigour, and certainly some of its revelations are rather startling, besides strongly suggesting not only that the law very often fails in its effect through the shortcomings of the system which has been formulated for its administration, but from inherent defects. It will hardly be credited, for instance, that with cholera within a day's journey from our shores, neither the manufacturer nor the retail seller of spurious disinfectants, bought under the fond belief that they destroy disease-germs in infectious cases, can be made amenable to the provisions of the Food and Drugs Acts. No matter what may be the assurances given on the label of the efficacy of the precious powders or other mixtures, and how worthless the preparation, the health committee of a parish can do nothing in the matter. Though the Adulteration Acts cannot be applied in these cases, there is some hope that there may be certain provisions in the Merchandise Marks Acts which the Board of Trade may be able to bring to bear upon the question. The trade in sham disinfectants seems to be increasing to an alarming extent, if we may accept all the astounding statements which are made in *Food and Sanitation*. In one parish in London, where large numbers of workmen reside, it has been found, we are told, that 75 per cent. of the disinfectants sold are adulterated."

Western Daily Mercury, April 18th.

"The spiritedly conducted little paper known as *Food, Drugs, and Drink*, which, by the way, is about to change its title and enlarge its scope, continues to hammer away at what is undoubtedly a weak spot in the law against adulteration. Retail traders are prosecuted time after time for vending tinned or packeted articles of food which prove on analysis to be adulterated, but the great manufacturing firms who get fat on the profits of the adulteration are rarely if ever touched. The difficulty of obtaining convictions in such cases is much increased by the ease with which expert medical and chemical evidence can be procured to set off against the testimony of the public analyst. Our contemporary calls on the censors of the medical and chemical professions to 'seriously consider the whole question of "puffing" testimonials, adulteration defending, and like practices now largely indulged in to the injury of scientific truth and of public health.' It declares that fraud in food stuffs is fostered to an alarming extent by the 'unchecked existence of a ring of reputed masters in science, ever ready to swear that milk without cream is equally as nutritious and valuable a food as milk containing cream, or even more glaring untruths than this.' These are grave allegations, and it behoves the honest members of the professions referred to, who we would fain hope are in an immense majority, to see that their reputations are vindicated."

"The necessity of making extraordinary provision to cope with a possible visitation of cholera this summer is bearing rather hardly upon the port sanitary authorities, who have practically to take precautions for the whole nation. The Tees Sanitary Authority are providing a new floating hospital, and at their last meeting Alderman Bulmer asked whether the charge would not be defrayed by the Government; no satisfactory reply could be given of course. It is probable (says *Food, Drugs, and Drink*) that it will come to the point that the Government will undertake all extraordinary precautions themselves in the future, and defray the cost of necessary works."

A SELECT COMMITTEE ON ADULTERATION TO BE APPOINTED.

IN reply to the Hon. A. de Tatton Egerton, M.P., the Right Hon. H. Fowler, M.P., president of the Local Government Board, made on the 20th inst. an important announcement. Mr. Egerton asked the President of the Local Government Board, in view of the inefficient carrying out of the Food and Drugs (1875) Act and Amendment Act, and to the unsatisfactory results of prosecutions undertaken under their provisions, whether he would grant a Select Committee to inquire into the whole subject, with a view to suggesting such amendment of the Acts as would render them more workable and efficient.

Mr. H. Fowler answered: "As the hon. member is no doubt aware, a Bill for the amendment of the Sale of Food and Drugs Acts is now before the House, and the Government propose to concur in the second reading of that Bill on the understanding that it will be referred to a Select Committee of the House. If this course is adopted, the main purpose for which a Select Committee to consider the operation of the Acts would be appointed would to a large extent be secured."

Mr. Fowler's answer does not in explicit terms promise that the whole subject of adulteration will be enquired into by the proposed Select Committee of the House of Commons. We trust, nevertheless, that such is the intention of the Government, but, if not, then it is to be hoped that the second reading will not be assented to without a definite pledge being secured that the Select Committee be empowered to enter fully into the whole question of the causes of the practical failure of the acts and remedies necessary to make them effectual.

VINEGAR PROSECUTIONS.

HEAVY PENALTIES.

GROCERS BEWARE OF SPURIOUS VINEGAR.

On January 14th last we published the following warning to grocers:—

“SPECIALLY COMMENDED TO VINEGAR MAKERS AND DEALERS.

“A business circular, issued by Messrs. Randall Bros., Palmerston-buildings, Old Broad-street, E.C., headed “Pure Acetic Acid,” has come into our hands, and will be found instructive reading by public analysts, inspectors under the Food Act, and others. It reads as follows:—

“PURE ACETIC ACID.

“Acetic Acid from acetate of soda, the product of the Vine and other vegetable substances, may be considered chemically, the most natural base for the production of ‘PURE VINEGAR.’

“It has a sweetness of flavor and uniformity of strength, and taste, not to be obtained by the Alcohol & Lime process and is far superior on hygienic grounds to acetic acid from Malt, the base of the so-called ‘Malt Vinegar’ this contains starch (albuminous) & saccharine matter, the effect of which is to produce a turbid appearance very objectionable to the consumer and which really is a generation of fungoid and bacteria. Vinegar from our acid remains always transparent and bright, containing no spurious substances. It has a long standing reputation in France where the laws of hygiene in reference to edible substances are very severe.”

The ignorant compilers of this precious document evidently require a lesson. Acetic acid from acetate of soda is not the product of the vine, but is obtained by the destructive distillation of any kind of wood. It is not the most natural base for the production of ‘pure vinegar;’ vinegar, as understood in this country being the product of the acetification of malt liquor, unless specially and expressly otherwise stated. From wood-acid the tarry odour and taste is exceedingly difficult to remove (although it is possible to do so), and as a consequence such acid is most objectionable. It not rarely contains strong traces of arsenic, due to the acid used for the decomposition of the acetate of soda. Malt vinegar does never contain starch, and starch is not ‘albuminous’ as any shilling primer would have told Messrs. Randall Brothers. ‘Saccharine’ is a term we know, but we have never heard of ‘saccharine,’ and surely it is hard upon malt vinegar to charge it with containing saccharine, ‘the effect of which is to produce a turbid appearance very objectionable to the consumer.’ As we don’t know the article, we cannot say whether this serious charge is true or not. But we do know that vinegar is largely adulterated with acetic acid, made, not from malt, but from wood. We know that it is an offence against the Sale of Food and Drugs Act to substitute the latter for the former, and we pity the poor dupes of the firm that has sent out the circular which we have quoted, and who, when they are found out under the Food and Drugs Act, will have to pay the piper, while Messrs. Randall will sit contentedly in Palmerston-buildings. This circular affords an illustration of the way in which retailers are made the dupes by illiterate and ignorant wholesale merchants.

Our warnings were unheeded, and the grocer’s journals as usual garbled or “burked” the cases.

The following are a few of the results of the carelessness of retailers who allowed themselves to be duped.

At the Bristol Police Court, on the 19th inst., Henry Baur, a shopkeeper, was summoned under the Food and Drugs Act for selling a pint and a half of fluid which he alleged to be malt vinegar, but which consisted of diluted acetic acid with colouring matter. Inspector Durbin spoke to having visited defendant’s shop at 18, Millpond road, Baptist Mills, where he paid for a pint and a half of vinegar, which, on being submitted to the analyst, proved to be not of the substance and quality of the article demanded. Defendant’s wife was behind the counter and sold him the vinegar. She drew the fluid from a barrel labelled “Pure Malt Vinegar.” Mrs. Baur stated that the vinegar was bought from a cider merchant, and she told the inspector she did not suppose there was any malt. Thomas Atyeo, cider and vinegar merchant, who sold the article in question to the defendant, stated that he did not profess that the vinegar contained any malt. He would not injure the health of the public by putting malt into his vinegar (laughter). What was malt but spoiled barley? (Laughter.) The magistrates said the defendant was quite in the wrong in selling diluted acetic acid as malt vinegar, and he would have to pay a fine of 10s and costs. This was the first case of the kind ever brought before the Bristol magistrates.

On the 24th inst., at the Newcastle Police-court, Walter R. Berrington, 67, High-street, Tunstall, was summoned for an offence under the Merchandise Marks Act, 1887.

Mr. Vachell, instructed by Mr. Toome, Droitwich, appeared for the complainants, the Fardon Vinegar Company, Limited, Glover-street, Birmingham; and the defendant was represented by Mr. A. B. D. Sword.

Counsel, in opening the case, read the sections of the Act under which the proceedings were taken. The offence which they alleged was that the defendant had sold goods to which a false trade description had been applied. On the 24th March last, a traveller named Phillips, in the employ of the Fardon Company, called at a shop in Chesterton kept by Mrs. Johnson. There he saw a cask apparently containing vinegar, branded with the name “Fardon.”

Having his suspicions aroused he obtained a sample of the “vinegar,” and had it analysed. The result of the analysis was to prove that the liquor was not vinegar at all, but acid. The “vinegar” was never made by the complaining company. The complainants had no desire to punish Mrs. Johnson; but rather the maker Berrington. It appeared that on the 31st of August last, the defendant sold the cask of “vinegar” to Mr. Johnson, who had since died. In February defendant called on Mrs. Johnson, and said “There’s that stuff I sold your husband. I don’t want you to sell any more of it.” Defendant, counsel submitted, had not only injured the customer, but the real manufacturer, by his conduct.

Evidence was given by Phillips, Mrs. Johnson and John Cobb, who is in the employ of Mrs. Johnson. The latter said the defendant told him not to sell the “vinegar” as malt vinegar but as acid vinegar. That was after Berrington had been convicted. After the visit of Phillips, the defendant wanted him to get rid of the vinegar and the cask, and offered to buy them. He said that when he sent out the cask it was marked “Cumberland vinegar.” Mr. E. W. T. Jones, analyst, said the “vinegar” consisted of diluted pyroligneous acid, coloured with brown sugar. Fardon’s, he believed, was brewed vinegar, and a different class altogether. He was afraid acid was extensively sold as cheap vinegar. Mr. A. A. Fardon deposed that his firm sold only malt vinegar.

For the defence, Mr. Sword set up the plea that the cask seen by Phillips was not the cask supplied by his client. There were two casks in the shop, one sent by him and the second by another wholesale grocer. They were of the same dimensions.

Defendant, called as a witness, said he took an order for vinegar from the late Mr. Johnson, in August, at 7½d. per gallon. He did not know how the liquor was supplied. Asked as to the alleged warnings to Mrs. Johnson and Cobb, he said they were general cautions given by him in their interest.

Cross-examined, the defendant said he made his “vinegar” of pyroligneous acid, and it was a fact that in February last he was fined £10 and the costs for selling it as malt vinegar. After hearing of the visit of Phillips, he used all his endeavours to induce Cobb to sell back the vinegar and the cask, but in vain.

Walter Round, carman in the defendant’s employ, said that the cask he delivered at Johnson’s shop was labelled “Cumberland vinegar.” The cask was not branded at all.

The Bench considered the case established, and imposed a fine of £5 and the costs.

At Hanley, on the 24th inst., before Mr. Harold Wright (Stipendiary) and Mr. W. D. Spandon, William Smith, Great York-street, Hanley, and Thomas Cartledge, 58, Loftus-street, Hanley, were summoned, under the Food and Drugs Act, for selling as vinegar an article which the analyst certified to be a sample of coloured and diluted pyroligneous or acetic acid.

Mr. A. Challinor, Town Clerk, prosecuted. The defendant Smith’s case was heard first. On the 17th of February, Inspector Salt called at the defendant’s shop and asked for a pint of vinegar, which was supplied to him by the defendant’s wife. A portion of the vinegar purchased was supplied to the borough analyst, Mr. James Baynes, Hull, who certified that it was not real vinegar, but acetic acid. For the defence, Smith went into the box and stated that the article was supplied to him as pure malt vinegar by David Norton, a licensed victualler, residing in Etruria-road. Smith handed in a receipt in which the article was invoiced as pure malt vinegar, the billhead bearing Norton’s name. He also said that on Friday night he saw Norton, who told him “it would be all right, that there would be a man at court to pay the fine.”

The Stipendiary said it was very evident that there was some person supplying these small shopkeepers with this article, which was described as vinegar, and was making an enormous profit out of it. He inflicted the full penalty of £10, carrying with it advocates’ and witnesses’ fees.

In the other case Cartledge gave evidence much the same as that given by Smith. He said he had received the article from Norton as pure malt vinegar, and Norton had promised to pay the fine. Cartledge was likewise fined £20.

ONE danger to which inhabitants in rural districts could be exposed by the acts of parish councils such as are proposed to be created by Mr. Fowler’s Local Government Bill, is the probability that they would recommend and order sanitary works to be taken which, through the ignorance of the council, would prove more injurious than the state of affairs they would be trying to remedy. There is no provision for giving professional assistance to these parochial bodies, and there is therefore no end to the blunders they might perpetrate. An instance of such ignorant blundering is given by Dr. Harrison, medical officer of Health to the Lincoln Rural Sanitary Authority, in his report for last quarter. He mentions that at a parish meeting at North Hykeham, it was decided to drain the churchyard by pipes into the beck running through the parish. The water from this beck is used for domestic purposes by several people living in the district, and after a short course the stream joins the river Witham, about a mile above the point, where water is taken in to form part of the supply for the city of Lincoln. It is startling to think of what injury might have been done had this scheme of the bucolics of North Hykeham been carried out, as it is Dr. Harrison has called the attention of the Sanitary Authority to it, and no doubt the necessary steps will be taken to teach the muddle-headed Hykehamites the elements of sanitation.

CIRCULAR NOTES.

USELESS ADULTERATION FINES.

The Greenwich District Board of Works has been discussing the smallness of the fines inflicted by magistrates on even flagrant cases of adulteration. On the Clerk's report of the results of the recent prosecutions by the Board, for adulteration of butter, at the Greenwich Police-court, Mr. Wheatley complained of the utterly inadequate sentences passed by the magistrate on the offenders, and said that the fine of 40s. in a case in which 75 per cent. of foreign matter was used in the butter, was ridiculously inadequate. The Chairman said he quite agreed with Mr. Wheatley, but the Board could do nothing. We, of course, fully sympathise with Mr. Wheatley. We have written over and over again about this neglect of their duty by stipendiaries and the Great Unpaid alike. All we can do is to recommend Mr. Wheatley to follow our example and keep pegging away at them.

RAILWAY RATES AND FOOD PRODUCTS.

We are in cordial sympathy with the efforts which are being made by Sir Albert Rollit and Sir James Whitehead, to stimulate the Board of Trade to "bring the railway companies to their senses," in the matter of the new railway rates, as Mr. Mundella grandly promised to do last February. We are getting out to May, and still there is no sign that the companies have become any more sane. On the contrary, they are taking advantage of the dilatoriness and supineness of Mr. Mundella's department to ignore the demands of the traders, and to actually increase rates beyond the limit of 5 per cent. to which they promised to confine themselves. The rates are absolutely ruinous to dairy farmers, small stockbreeders, market gardeners, grocers and produce dealers of every kind. As Sir Richard Paget told Mr. Mundella, three months ago, the struggling agriculture of this country has more burdens than it can bear without this last straw to weigh it down. We expect that next week a vigorous effort will be made by the traders to raise the whole question in the House. In the meantime, we join with Sir James Whitehead in advising every trader to refuse to pay any rate higher than that in force last year.

IRISH AUTHORITIES AND BUTTER ADULTERATION.

We have already commented on the activity shown by the Royal Irish Constabulary in instituting an organised inspection of the food supply of the chief provincial towns. Mr. David Harrel, the new Under Secretary for Ireland, is, we understand, largely responsible for the new departure, than which there could be no better work done by the force. Their services have been offered to the various local authorities as Inspectors under the Sale of Food and Drugs Act, 1875, and in many cases have been accepted. When the offer came before the Waterford Corporation, for instance, it was at once taken up, Ald. Ryan remarking upon the good that might be done to the butter trade by checking the fraud of unscrupulous persons. We hope that the injury to the Irish butter trade, caused by excessive water and salt adulteration, will be brought home to the real evil doers, and that central authorities, like the Cork Butter Exchange, will assist the police in checking the fraud they, among others, profess to condemn.

PURE FOOD LAWS IN THE UNITED STATES.

With the advance of scientific knowledge, even the local authorities of the land of wooden nutmegs are waking up to the necessity of instituting a crusade against adulterated and bogus food stuffs, as we from time to time have shown. From the *Washington Republic* of the 9th inst., we learn that in the United States the adulterations that are employed in tea, coffee, sugar, spices, condiments, and preserved fruits and jellies, are enough to make one resolve to starve before touching any of the articles named. The adulteration extends to the baker's bread the poor man eats, and in many States to the butter he spreads upon it. A persistent effort is now being made by grocers of the best class against this wholesale poisoning. They have mighty manufacturing interests arrayed against them, and these doubtless helped to defeat the Pure Food Bill recently rejected by Congress. But, says our contemporary, it will come up again, and it will keep bobbing up till its iniquitous and diabolical opponents have gone to the reward they earned by making white clay candies, yellow ochre mustard, brick dust red pepper, and chicory coffee.

SPURIOUS DISINFECTANTS.

The quarterly report of the Derbyshire County public Health Committee of which Lord Waterpark is chairman, says:—

"A short time since the attention of your Committee was called to a certain so-called disinfectant known as the Victoria Carbolic Powder. It would appear that this powder is extensively used as a disinfectant, but it is believed that for this purpose it is absolutely worthless. A very strong article has been written in 'Food, Drugs and Drink,' dealing with this powder, and your Committee take this opportunity of endeavouring to give publicity to the worthlessness of this article, as it is probable that in many cases attempts have been made to use proper disinfectants where necessary, but such attempts have been rendered futile by the fact that this worthless powder has been used."

We shall be curious to see what Hull has to say upon the question of the carbolic we wrote of last week, and what Mile End has to say about its dirty water disinfectant at 3/6 per gallon. In the meanwhile we are glad to see that our exposures are doing good service.

FRENCH AND ENGLISH MINISTERS OF AGRICULTURE.

A CONTRAST.

The French Minister of Agriculture is engaged in devising measures for suppressing, or at least limiting, the adulteration of butter by admixture of margarine. Means are to be provided for obtaining samples of butter at railway stations and at the shipping ports from consignments of merchants. It is understood that a certain proportion of admixture—probably 15 or 20 per cent.—of margarine will be allowed. Any excess beyond this limit will be considered fraudulent. A committee of leading agricultural and other chemists is to be appointed, which will meet at the Ministry of Agriculture for the purpose of prescribing methods of testing, quickly and accurately, the quality of all samples submitted for examination. M. Viger has resolved to demand urgency for the passing of the Bill which he is framing. This movement appears to be inspired by the severe competition to which French butter is exposed from that of Denmark in the English market. Last year the imports of the latter into the United Kingdom amounted to about £5,000,000, whilst those of French butter were only about £3,000,000.

There is a chance for Mr. Herbert Gardner to do something to earn the handsome salary he receives for an office that might be useful. The French Minister of Agriculture is not above taking the advice of scientists upon questions affecting French agriculture. If Mr. Gardner were to follow his laudable example, a means might readily be found for checking the vast frauds practiced in imported butters, and English dairy farming be benefited accordingly. Denmark has increased its butter output to this country in ten years from 304,722 cwt. to nearly 900,000 cwt. Sweden has increased from 67,821 cwt. to 234,987 cwt., the reason being that scientists of repute and knowledge, like Professor Stein, advise the Governments of our competitors, whilst ours are advised by ignoramuses. A State endowed society for analytical research is in the interests of agriculturists, grocers, and the public an urgent necessity, and would save this country millions of pounds yearly were its recommendations acted upon. It is the recognition of the important part far-seeing science can play in developing a countries' industries, that has pushed Denmark as forward as the absence of such recognition has driven England backwards.

WEIGHTS AND MEASURES.

At the last meeting of the Bristol Grocers' Association, Mr. Jennings, speaking on the adjustment of weights, said:—

"He could not understand why the law should make it imperative that because the authorities had drilled two holes in a brass weight for their own convenience, they should refuse to stamp it. They condemned such weights, and if brass, marked them across, and if iron, broke them up, thus compelling new weights to be purchased. He hoped in the next Parliament by better organisation, and by sticking strongly to some member of Parliament, they would get what was complained of altered. Sir Albert Rollit had a Bill to deal with weights and measures, but that was only shifting the burden from one shoulder to the other. What the grocers wanted was to see their weights were correct, and if they had two holes in them they should be stamped in the two holes, and that when the weights were so gone that they could not be used any more, they should buy new ones. Brass weights cost 1s. 8d. a pound, and the old brass merely fetched 3d. per lb. He hoped the members would second the efforts of the committee to get the injustice removed. Mr. Jennings afterwards drafted a resolution on the subject, and moved it—'That this meeting condemns the arbitrary way in which our weights have been destroyed, and considers that the law needs amendment.'"

PUBLIC HEALTH NOTES.

The Derbyshire County Council have agreed to allow the sum of £50 towards the expense of lectures to be delivered at Chesterfield under the auspices of the Association of the Medical officers of Health.

The report of the Public Health Committee of the Derbyshire County Council, states :—

"In Alfreton there is an absolute want of means of isolating persons suffering from dangerous infectious diseases. Of Bakewell, it is said the Local Board have now resolved to take the advice of a competent engineer upon the best way for treating the sewage before discharging it into the river Wye, and that the Board will further erect an isolation hospital.

Belper is said to be sadly in need of a sewerage and sewage disposal system. The attention of the Authority has previously been called to this matter, but without apparent result at the present time. The system of scavenging adopted in this district is also very unsatisfactory, and the method at present adopted is not only costly but ineffective. The slaughter-houses require considerable attention and distinct nuisances arise in certain cases. The dairies, milk-shops, and cowsheds orders do not appear to be enforced, and are practically a dead letter. No provision has been made for isolating small pox or other infectious disease in the event of its importation into the district. The attention of the Authority has been called to these matters.

In Buxton there appears to be no register kept in accordance with the dairies, cowsheds, and milkshops orders, 1885 and 1886. The milk trade is one of such very great importance that these orders should be strictly enforced. It would also appear that the provisions of the Public Health Act, 1875, as to a register of common lodging-houses being kept, are not enforced, the result being that the various other provisions of the Act affecting these houses are not carried out.

At the present time, when persons seeking employment are in many cases carrying small pox to the various parts of the County, the necessity for keeping common lodging-houses under sufficient control is most important. The attention of the authority has been called to these matters, and it is hoped that they will take some steps to see that the orders above referred to are more strictly enforced.

The borough of Chesterfield was a short time since considerably extended, and the Corporation has lately appointed a Nuisance Inspector to devote his whole time to the duties of his office. It has been proposed to erect Artisans' Dwellings, and the Authority are taking steps to deal with the sewage of their district in a more satisfactory manner than hitherto."

The sixth lecture of the series under the auspices of the Dublin Health Society was delivered in the Town Hall, Kingstown, on the 19th inst., by Dr. Edgar Flinn, the subject being "Fashion in Deformity, a Study in Hygiene." He commented on the lamentable fact that the laws of society were opposed to the indiscriminate use of healthy dress, and in selecting attire a very large proportion had to conform to social dictates before they could attend to the demands of health. Health, if he might propound a paradox, was only noticed when it was absent. It was a matter then of no great surprise that the hygienic relations of dress excited but scanty interest. Dr. Flinn referred to the effects of inordinate constriction of the organs of digestion and respiration, and strongly condemned tight lacing as being the indirect cause of many ailments which rendered life a misery.

In his report on the health of the Kings Norton Union, during the past year, Dr. Hollinshead, the medical officer of health expresses a strong opinion that we are on the eve of a smallpox epidemic which may spread throughout the country. There were no cases in his union, but the disease existed at Birmingham, and he declares that the only effectual preventive measures will be vaccination and re-vaccination, and he does not believe that there is much danger of the disease being propagated by the use of vaccine lymph, where due precautions are taken.

The ease with which this fearful scourge can be propagated was shown last week in Derbyshire, where the pretty little village of Totley has been devastated by it. The victims are mostly navvies working on the Dore and Chinley line, some of whom live in the cottages in the village and others in temporary buildings. Some of the houses are declared to be in a disgraceful condition, and over crowding is general. Last Saturday there were 40 cases of smallpox in the place, making 120 in four months. The principal victims are navvies, and all the natives who have caught the disease, except one, had not been vaccinated.

ADULTERATION PROSECUTIONS.

MILK.

At the Lambeth Police-court, on the 14th inst., the Camberwell Vestry had four summonses against vendors of milk. Mr. Marsden, solicitor to the Vestry, prosecuted, and stated that there appeared to be an impression amongst vendors of milk that the inspectors were idle on Sundays. On Sunday, the 19th March, however, Inspector Dewey took four samples from vendors in the streets. In the first case Thomas Smy, of 8, Brisbane-street, Camberwell, was summoned for selling milk containing 14 per cent. of added water. Mr. Moore, solicitor, who appeared for the defence, raised some legal points, but Mr. Biron overruled them, and fined the defendant 20s. and 12s. 6d. costs. William Brown, a milk salesman, of South-grove, Bow, was summoned for selling milk from which 30 per cent. of its original fat had been abstracted. For the defence, Mr. Philcox contended that no offence had been disclosed under the section under which the proceedings were taken. Mr. Biron admitted the objection, and dismissed the summons. The two other cases were adjourned.

At the Clerkenwell Police-court, on the 19th inst., Thomas Osborne, of 99, George's-road, was summoned at the instance of the Islington Vestry for selling, on March 17th, a pint of milk which was adulterated with 25 per cent. of added water. Inspector Jordan proved the purchase. Defendant's wife appeared, and said she sold the milk as she received it. Since the summons she had obtained a written warranty. Mr. Bros ordered the costs to be paid, 12s. 6d.

Thomas Baggaley, of 35, George's-road, was summoned by Inspector Jordan for selling, on March 17th, a pint of milk which was found, when analysed, to be adulterated with 13 per cent. of added water. Defendant said he only sold three quarts of milk a day, and retailed it as he received it. Ordered to pay the costs, 12s. 6d.

Edward Ludbrook, of 92, George's-road, was summoned by Inspector Jordan for selling adulterated milk on March 17th. The adulteration in this case was 35 per cent. of added water. Defendant said he sold the milk as he received it. A fine of 10s. 6d. and costs was imposed.

Mark Ansell, of 43, Rhodes-street, was summoned by Inspector Jordan for selling, on March 17th, milk adulterated with 17 per cent. of added water. Defendant's wife appeared, and said she was not personally guilty of adulteration. Since the summons she had taken a warranty. Mr. Bros ordered the costs to be paid, 12s. 6d.

William Jones, of 32, Danbury-street, was summoned by Inspector West for having sold milk which was found, when analysed, to be adulterated with 13 per cent. of added water. Mr. Moore, solicitor, appeared for the defence, and urged that defendant sold the milk as he received it from the wholesale vendor. A fine of 20s. and costs.

William Morgan, of 3, Frome-street, was summoned for selling, on March 17th, a pint of adulterated milk. Mr. Moore, solicitor, appeared for the defence. Inspector West proved the purchase, and the analyst's certificate showed an adulteration of 20 per cent. of added water. For the defence, it was alleged that the milk had been adulterated by one of Mr. Morgan's servants, who had been discharged. Two previous convictions were proved against Morgan for adulteration, and he was now fined 40s., and 12s. 6d. costs.

Harry Johnstone, of 3, Cottenham-road, was summoned by Inspector Pain for selling adulterated milk, and fined 10s. 6d. and 2s. costs. The adulteration was 8 per cent. of added water. Defendant said he sold the milk as he received it.

Roderick Protheroe, of 115, Durham-road, was fined 10s. and 2s. costs for selling milk adulterated with 5 per cent. of added water. Inspector Pain, who proved the purchase of the milk, said defendant only kept a small shop.

On the 17th inst., at the Retford Borough Police-court, W. Rawling, for selling milk certified by the public analyst to be adulterated with 17 parts of added water, was fined 15s. 6d., including costs.

At the Stratford Petty Sessions, on the 12th inst., John Bowen, of St. Mary's-road, Plaistow, was summoned for selling, on the 16th ult., milk adulterated with 11 per cent. of added water. Defendant pleaded not guilty. He knew nothing at all about it, having been ill for some weeks. John Thomas, the servant from whom the milk was purchased, stated that he left a quantity of water in the milk can to keep it cool, and accidentally poured the milk into it. A nominal penalty of 1s. and costs was inflicted.

At the Drogheda Petty Sessions on the 14th inst., Mr. Weldon summoned Margaret Waters for selling milk adulterated with 9 per cent. of water. The case was adjourned from last Court day, to have the milk analysed at Somerset House. Somerset House said the milk was not adulterated. The case was dismissed, and the Bench allowed £1 costs.

At the Rochdale Borough Police-court, on the 19th inst., before he Mayor (Mr. James Duckworth in the chair) and other magistrates, William Green, of Higher Edenfield Farm, farmer, was summoned for selling milk not of the nature and substance demanded by the purchaser, but adulterated with 12 per cent. of water. Mr. James Leach, the Deputy Town Clerk, prosecuted, and Mr. J. Clegg defended. Mr. Leach said defendant was charged with a breach of section 6 of the Sale of Food and Drugs Act, of 1875, whereby he had rendered himself liable to a penalty not exceeding £20. It appeared on Wednesday, the 22nd March, James Schofield, an inspector of nuisances in the borough of Rochdale, saw defendant in Halifax-road with his cart, and asked him for a pint of new milk. He was supplied with it, and he paid 1½d. for it, and the milk was divided into three parts. One was given to the defendant and the other two retained by the inspector. The milk had been sent to the borough analyst, who certified that 12 per

cent. of water had been added to the milk. Mr. Clegg, for the defence, said unfortunately for defendant in this case he was bound to admit the milk contained a certain amount of added water, but defendant was not aware of it at the time he sold it to the borough analyst. On the morning in question the cowman spilt a quantity of milk. He did not tell defendant, but added some water. The cowman had since admitted this, and had been discharged. He asked the Bench to be lenient with defendant, as this was done without his concurrence or sanction. Milk had been taken from him on two previous occasions and analysed, and he had had no complaint, showing that he had endeavoured to conduct his business in a proper manner. William Green, the defendant, supported Mr. Clegg's statement. He said that when he charged the milkman with adding water he admitted having let a can of milk fall, and he thought he would not be found out if he made it up with water. He had since been discharged. Abraham Lord said he had worked in the employ of defendant for about three weeks. Green was not aware he had added water to the milk. When he got up after milking a cow he spilt a can of milk, and he thought he would make it up with water. (Laughter.) He did not tell defendant what he had done until he got the summons. The Chairman said defendant would be fined 10s. 6d. and costs or distress, or fourteen days.

COUNCIL PROSECUTIONS.

On the 13th inst., William Bazley, of the Dairy, Lower Fore-street, Edmonton, was summoned by Inspector Tomlin for selling milk adulterated with 6 per cent. of added water, and was ordered to pay a fine of 10s. and costs.

George Tippings, milk vendor, Windso-road, Penarth, appeared at Penarth Police-court on the 10th inst., in answer to a charge of selling adulterated milk. Mr. Superintendent Wake represented the prosecution. Defendant pleaded guilty, stating, however, that he sold the milk as he received it. Fined 20s. and costs, the Bench remarking the penalty would be higher had it not been the first offence.

At the Epsom Petty Sessions, William Lilliot, of Ewell, was summoned by R. A. Houghton, inspector under the Food and Drugs Act, for selling on the 9th ult., new milk from which 50 per cent. of the cream had been abstracted. Charles De Chastlain, assistant to the inspector, said he bought a pint of new milk from the defendant as he was delivering milk in Epsom-road, Ewell, and paid 2d. for it. Inspector Houghton corroborated, and put in the analyst's certificate, which stated that the milk was deficient in natural fat to the extent of 50 per cent. Defendant alleged that on the date mentioned in the charge he was short of milk, and bought half a gallon from a farmer. He knew it was not so good as his own, but he believed it was new milk, and as it was a little bit older, he was selling it first to the small customers. He did not mix it with his own. A boy in defendant's employ spoke as to buying the milk from the farmer, and paying the usual price for new milk. De Chastlain, recalled, said there must have been about a gallon in the can at the time he was served, or defendant would have had to tip the can when serving him. Defendant was fined 10s., and 13s. 6d. costs.

CONDENSED MILK.

At the West London Police Court on the 13th inst., John Blake, of Adrian-terrace, was fined 20s., with £1 13s. 6d. costs in respect of the sale of condensed milk, which had the fat abstracted.

BUTTER.

At the Clerkenwell Police-court on Wednesday, the 19th inst., Peter Foot, of 45, Percival-street, was summoned at the instance of the Clerkenwell Vestry for selling butter adulterated with 75 per cent. of foreign fat. Defendant pleaded guilty. What he sold was really margarine. Butter could not be purchased for 1s. a pound. A previous conviction for the same offence was proved against defendant, and he was fined 20s., and 2s. costs.

At Marylebone Police-court on the 12th inst., Thomas Dominico, of 83, Stanhope-street, was summoned for selling as butter an article containing 80 per cent. of foreign fat, and 13½ per cent. of salt and curd. The defendant said the business belonged to his wife, and he served the inspector with the wrong "stuff." Mr. Plowden fined him 20s., with 12s. 6d. costs.

At Enniskillen, on the 17th inst., Sergeant Sheridan charged a man named Thomas Kennedy, of Head-street, with selling adulterated butter. Mr. Charles F. Falls, solicitor, appeared for the defendant. The sergeant said that on the 16th March he went to defendant's shop in Head-street and purchased a sample of butter, which he sent to Sir Charles Cameron, public analyst. On 31st March he received a certificate from Sir Charles stating that he was of opinion the sample was not pure butter, and that it contained at least 20 per cent. of fatty matter foreign to butter. Mr. Falls said the reports of Sir Charles Cameron had been impugned in several cases, but his client was not prepared to send the sample retained to Somerset House for analysis. His client purchased the butter from Mr. McNulty, who was a large butter merchant, and he in turn had got it from country people who it might be expected could hardly have enough scientific knowledge to adulterate it. Mr. McNulty and defendant were examined, and proved that they had not adulterated it. The defendant was fined £1 and costs.

MARGARINE.

Richard Thomson, 117, Great Homer-street, was summoned for having exposed twelve lumps of margarine in the window of his shop on the 28th ult. Mr. Thomson summoned his assistant, Henry Parry, for having neglected the instructions given him with regard to the margarine. It was all owing to the carelessness of the assistant that the labels were not attached to the margarine. The case against Mr. Thomson was dismissed, and Parry was fined 10s. and 15s. costs.

At Edmonton, on the 12th inst., Wm. Bazley was summoned for exposing for sale a quantity of margarine without having a label attached thereto as required by the Margarine Act. The defendant, who pleaded ignorance was ordered to pay a fine of 40s. and costs.

MUSTARD.

A "general" shopkeeper, named Charles Keyser, of Silvertown, was heavily fined at the West Ham Court, on the 19th inst., for selling mustard adulterated with 30 per cent. of wheaten flour colored with turmeric. Mr. Baggallay said he would impose a nominal fine of 2s. 6d., as the costs were heavy.

SODA WATER.

At the Edmonton Petty Sessions, on the 20th inst., two cases, instituted by one of the Middlesex County Council's Inspectors in respect of the sale of a liquid as soda-water, came before the Bench. The certificates were in identical terms, the analyst stating:—"I am of opinion that the sample contains no bicarbonate of soda, but is simply carbonated water." In cross-examination, the Inspector said that, according to the British Pharmacopœia, a ten-ounce bottle should contain twenty grains of bicarbonate, but he was not able to say if such a quantity would be injurious to a person taking soda-water as a beverage. If there had been any quantity of bicarbonate in the liquid, he would have been satisfied. Various objections to the proceedings were taken for the defence, but they were overruled. The standard fixed in the pharmacopœia, it was said, was for a drug, and not for soda-water sold as a beverage; for this latter there was no legal standard, and all the purchaser had a right to demand was what was commonly known as soda-water. It was mentioned that the absence of bicarbonate was not due to any desire on the part of the manufacturers to increase their profits, for a half-cwt. of soda could be bought for three shillings, and that quantity would be sufficient to allow three grains to be placed in each of 28,000 bottles. Mr. Alderman Latham, in pronouncing the decision of the Bench, said there was nothing to show that soda-water necessarily implied the presence of bicarbonate of soda in the article sold. Therefore, it appeared to the Bench that the Complainant asked for soda-water and obtained what he asked for, and, consequently, the summonses would be dismissed. The Justices allowed the Defendants a guinea each for costs.

WHISKY.

At Hastings Police Court on 20th inst., Alice Beatrice Dawson, of the Belle Vue Hotel, was summoned for selling one pint of Irish whisky adulterated with water and being 27 degrees under proof.—The Town Clerk prosecuted, and Mr. Davenport Jones defended.—Mr. Cheshire, the Public Analyst, said on March 22nd he received a sample of whisky from the Inspector (Mr. Inskipp). Upon analysing it he found it 27 per cent. under proof, and had been adulterated with water over the 25 per cent. allowed.—Cross-examined: He examined it by Sykes thermometer, and knew that varied to a certain extent. If it was not exact he made an allowance of a half per cent. He followed the trade custom. Distillation was the more exact method. It was used by large wine merchants. If necessary he should use this as a check. It was possible the spirit might have come into this condition by evaporation and not by water.—The Clerk: The charge is selling it.—Mr. Jones contended it must be shown that the adulteration was caused by water. The defendant left the work to her manager. Looking at the whole facts of the case and the very small difference of two degrees, he asked the Bench to dismiss the summons. He called Walter Waite, the manager, who said he had charge of the cellar. He received the spirit from the wine merchant and broke it out. His Sykes thermometer had been broken by a boy, and he used a new one of another maker, which he did not test. It was his desire to give within 25 degrees.—The Bench did not consider the offence an intentional one, but imposed a fine of 10s. and costs.

CORRESPONDENCE.

To the EDITOR of FOOD AND SANITATION.

SWANSEA BAKING POWDER CASE.

SIR,—At the conclusion of your report of the above case in your last issue, you say "the old question introduced by the Recorder of Cambridge that baking powder was not an article of food was raised, but brushed aside by the Bench as unworthy of serious consideration."

The statement we have quoted, is inaccurate and misleading. It is correct to state that the Bench decided against the appellant on the points of law raised, but the Bench on the other hand at once acceded to Mr. Brynmor Jones' request that a special case for the opinion of the High Court should be stated. We need hardly point out that the granting of a special case is in the discretion of the Bench, and had they "brushed aside" the points of law "as unworthy of serious consideration" the Bench would not have stated a special case.

The special case will in due course be sent to the High Court for argument, and in the event of that Court ruling in favour of the appellant, the conviction obtained against him would be quashed. Therefore until the decision of the High Court has been obtained, the Swansea case must still be regarded as sub-judice.

We are, Sir,

Yours faithfully,

W. H. TILLET & Co.,

Solicitors to the appellant.

Norwich, 19th April, 1893.

FOOD AND DRUGS ACT INSPECTORS AND CERTIFICATES.

IS A SOMERSET HOUSE CERTIFICATE ADMISSIBLE AS EVIDENCE?

To the EDITOR of FOOD AND SANITATION.

SIR,—I have read the excellent paper of Mr. B. Scott-Elder on "Hints to Food and Drug Inspectors" with much interest. Its circulation cannot fail to have a most beneficial effect upon the conduct of cases under the Sale of Food and Drugs Acts.

I would, however, point out that, according to my reading of the Act, Mr. Scott-Elder, when warning inspectors never to allow an outside analyst's certificate to be introduced, "*except of course that of Somerset House*" makes a statement open to grave doubt.

It is quite clear from the Act that *only* the certificate of the public analyst of the district in which the prosecution is undertaken can be accepted by the Bench as evidence. Section 21 distinctly provides, "the production of the certificate of the analyst shall be sufficient evidence of the facts therein stated, unless the defendant shall require that the analyst shall be called as witness," and sections 10 and 11 define who is "the analyst" referred to in section 21. But there is absolutely nothing in the Act rendering the certificate of the Somerset House analysts evidence. The only section of the Act which refers to Somerset House (22) provides, "The justices before whom any complaint may be made, or the Court before whom any appeal may be heard, under this Act, may, upon the request of either party, in their discretion, cause any article of food or drug to be sent to the Commissioners of Inland Revenue, who shall thereupon direct the chemical officers of their department at Somerset House to make the analysis, and give a certificate to such justices of the result of the analysis; and the expense of such analysis shall be paid by the complainant or the defendant as the justices may by order direct." *There is not a word in the clause which permits the justices to accept the certificate of the Inland Revenue officers as evidence.* They shall furnish a certificate, but in the absence of definite instructions, such as are given in the case of public analysts' certificates, the Somerset House certificate is clearly *not* evidence.

Either the Somerset House analysts are public analysts, or they are not. If they are not, then their certificate is not evidence. If they are, they are bound by the other provisions of the Act, including the schedule, under which certificates are to be framed. The Somerset House chemists have hitherto issued certificates entirely different in form from those stipulated for analysts under the Act. They have reported upon avowedly decomposed articles, such as milk, weeks or even months old, while public analysts have felt themselves, for legal and chemical reasons debarred from doing so. Dr. Bell and his colleagues in this respect have clearly taken the position, that they are not public analysts. Hence, according to their own practice, their certificates, unless supported by personal attendance in court, can have no legal validity.

I raise this important point, in order that in disputed cases which may in future occur, inspectors may not only take care to exclude certificates from outside analysts, but also from the department at Somerset House, and insist upon the personal attendance of the revenue chemists for the purpose of cross-examination.

I remain,

Yours faithfully,

OTTO HEHNER,

Public Analyst.

11, Billiter-square,
London, April 22nd, 1893.

WEDNESDAY'S PRODUCE MARKETS.

CORN.—The grain trade is firm, and in many of the provinces wheat and maize are quoted rather dearer. At Mark-lane there was only a small attendance of buyers, and the trade was quiet, but prices for wheat ruled firm, up to Monday's rates, and oats were quoted 3d. dearer, all other spring corn firm. In the cargo trade wheat opened with a quieter feeling, and at the close values were 1½d. to 3d. lower to sell. Plate sailer on sample April 10, sold (late yesterday), at 27s. 6d.; and ditto, April 9, at 27s. 6d.; Californian, off coast, sold at 29s. 9d. for prompt shipment; 30s. 9d. is bid Plate sailers, May-June shipment, 27s. 6d. is bid; Rosario Santa Fé, April 6, 26s. 9d. paid for; ditto, loading, 27s. 3d. is asked; a parcel of hard Manitobian, on passage, sold at 30s. 3d.; No. 1 hard Duluth, May 8, made 30s. 6d.; No. 1 northern spring, second half of May and first half of June, sold at 28s. 6d.; No. 2 club to London, April-May, 28s. 9d. paid. Maize easier and inactive. Galatz Foxanian on passage, held for 21s. 6d.; a parcel of old-mixed American Shipping, sold at 20s. 9d. Barley remains steady for near positions, but distant keep very firm at the recent advance. Azoff, on passage, 15s. 4½d. bid, and for July-August shipment, 16s. 3d. is said to be obtainable. Arrivals this week:—English and Scotch: Wheat, 370; barley, 1,000 quarters. Foreign: Wheat, 42,220; barley, 21,560; oats, 23,410; peas, 120; maize, 10,640 quarters; flour, 76,520 sacks.

SUGAR.—The market continues very strong, and all descriptions show an upward tendency in value. Refined in good demand for pieces and crystals, and prices favour sellers. Stoved goods firm. Foreign refined hardening in value. Cane sorts dearer. Tate's cubes, firsts, 22s 6d; seconds, 21s 6d; crushed, firsts, 21s; Liverpool crystals, firsts, 22s 6d; small, 21s 9d; seconds, 21s 3d; granulated, 20s 6d; Martineau's cubes, firsts, 22s 6d; seconds, 21s; titlers, 22s; pulverised, 21s 3d; chips, 21s 3d; granulated, 20s 9d per cwt. A large business done in grocery crystallised West India at prices ranging up to 20s 6d, and for a parcel of choice Barbadoes 2½s 9d,

reported paid. Beet active, and 3d. to 4½d higher. Closing firm. Sales of beet large.

TEA.—Indian teas for price continue to meet a good demand at firm rates. Other grades selling without alteration. The catalogues to-day have offered 10,965 packages. The Java teas, comprising 1,053 packages, sold fairly well; 5,956 packages China, including black and red, red leaf Congous, Canton new makes, and selected went at moderate rates. Terminals occasionally easier.

COFFEE.—A firm market for colory coffee, which in the auctions to-day sold well at fully steady rates to rather dearer. Brazil futures quiet. Closing steady. New York opened ten to twenty points up. Havre afternoon report: April, 89f.; May, 88½f.; September, 88½f.; December, 88½f. Hamburg: April, 75½m.; May, 74½m.; September, 74m.; December, 73½m.; Amsterdam, 50½c.

SPICES.—At the auctions to-day a quiet tone prevailed. 3,170 bags black pepper, two-thirds sold: Singapore, 2½; Lampong, 2½ to 2¾; Tollecherry, 3½d. 585 bags white, third sold; Penang, 3½ to 3¾d; Singapore bought in 4½d to 5½d. 561 bags Pimento, few lots sold, 3½ to 3¾d. 59 barrels Zanzibar cloves bought in, 4½ a lot or two selling at 3¾d to 3½d. Of 12 cases Penang 3 cases packed sold 1s; rest out unpacked, 8½d to 10d. Of 50 packages nutmeg about half sold; Penang 70's at 2s 8d; 84's at 2s 3d; Bombay, 83's at 2s 3d, defective 7d to 11d, 68's out 3s 1d. 33 cases Penang mace bought in, 2s to 2s 4d; ordinary and broken, 1s 6d to 1s 9d. 23 cases Bombay, part sold; wild 6d to 1s. 31 packages, West India spices sold; nutmegs 1s 2d to 2s 1d; in shell, 11d to 1s 2d; mace 1s 7d to 2s. 60 bags cinnamon chips bought in 2½d; 4 bags bark sold, 1½d per lb. 152 packages Zanzibar chillies bought in, 50s to 55s; and 65 bags Sierra Leone, 50s; 20 bags long pepper bought in, 13s; 63 packages Cochinchina ginger out; 288 cases Japan, part sold, 55s; rest out, 60s; 20 bags African, part sold, 40s 6d; 171 barrels Jamaica sold, 69s to 76s 6d; common, 59s 6d per cwt.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended April 22, 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities.	
		1892.	1893.
Animals living:—			
Oxen, bulls, cows and calves	.. Number	8,796	3,512
Sheep and lambs	.. ..	—	—
Swine	.. ..	—	—
Fresh meat:—			
Beef	.. .. Cwts.	38,134	7,432
Mutton	.. ..	16,577	59,642
Pork	.. ..	1,645	2,614
Salted or preserved meat:—			
Bacon	.. ..	72,559	44,919
Beef	.. ..	4,856	4,843
Hams	.. ..	17,349	17,138
Pork	.. ..	2,857	2,905
Meat unenumerated, salted and fresh	.. ..	5,427	6,510
Meat presv'd., otherwise than by saltg.	.. ..	8,277	9,019
Dairy produce and substitutes:—			
Butter	.. ..	39,646	45,008
Margarine	.. ..	19,613	24,079
Cheese	.. ..	12,230	11,216
Condensed milk	.. ..	6,387	7,729
Eggs	.. .. Grt. Hndr.	202,598	225,391
Poultry and game	.. .. Value £	6,554	3,809
Rabbits, dead (not tinned)	.. .. Cwts.	615	641
Lard	.. ..	30,847	20,557
Corn, grain, meal and flour:—			
Wheat	.. ..	893,058	585,129
Wheat meal and flour	.. ..	416,533	361,007
Barley	.. ..	210,888	199,625
Oats	.. ..	161,859	192,211
Peas	.. ..	20,864	34,737
Beans	.. ..	41,115	41,541
Maize or Indian corn	.. ..	732,853	618,991
Fruit, Raw:—			
Apples	.. .. Bush.	56,930	51,023
Oranges	.. ..	166,648	87,756
Lemons	.. ..	—	20,756
Cherries	.. ..	—	—
Plums	.. ..	—	—
Pears	.. ..	138	128
Grapes	.. ..	52	389
Unenumerated	.. ..	6,618	10,831
Hops	.. .. Cwts.	2,456	2,096
Vegetables:—			
Onions, raw	.. .. Bush.	133,263	70,044
Potatoes	.. .. Cwts.	19,796	57,608
Unenumerated	.. .. Value £	10,407	18,827

* Not separated in 1892.

Statistical Office, Custom House, } T. J. PITTAR.
London, April 24th, 1893.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT - COFFEE COMPANY.

(Proprietors, KRIKORIAN BROS.)

MONUMENT BUILDINGS, LONDON, E.C.

THE SANITARY INSTITUTE OF GREAT BRITAIN has always given the Highest Awards, when tested against other so-called Disinfectants, to

Calvert's No. 5 Carbolic,

which is of the quality adopted as "Standard" by the British and German Governments after bacteriological tests. Unscrupulous statements that other Disinfectants are superior to genuine Carbolic Acid should be treated with the distrust they deserve. Sold by most Chemists in 8 and 16 oz. bottles, at 1s. and 1s. 6d. each; $\frac{1}{4}$, $\frac{1}{2}$, and 1 gallon tins, 2s. 6d., 4s., and 6s. 6d. each; or larger lots at rates on application to

F. C. CALVERT & CO., MANCHESTER.

60 MEDALS, &c.

IMPORTANT NOTICE TO OUR READERS.

On April 22nd, we changed the title of *FOOD, DRUGS, AND DRINK* to

Food & Sanitation.

We take this opportunity of thanking the Medical officers of Health, Public Analysts, Food and Drug Inspectors, Sanitary Inspectors, Weights and Measures Inspectors, grocers and members of local authorities who have written us commending our efforts, and we hope that the improvements we contemplate, will make the paper still more valuable to our subscribers and the public. We would be glad if Medical Officers and others sending us reports would, where possible, send them in duplicate.

SPECIAL NOTICE TO OUR READERS.

We would be pleased if readers of this journal, in enquiring for samples of any of the preparations advertised in it, would mention the name of the journal in their enquiry.

SANITARY AND FOOD AND DRUGS INSPECTORS' DIFFICULTIES.

Many of our subscribers having pointed out to us how useful a column for questions and answers would be, we have pleasure in informing our readers that we have arranged with eminent sanitary, analytical, and legal experts, who will be pleased to answer and advise gratis through this column, upon any questions of procedure or difficulties on which information is required.

THE representatives of the principal port sanitary authorities have already taken action in the direction of claiming State aid in their efforts to deal with any possible outbreak of cholera this year, by interviewing the Chancellor of the Exchequer at the House of Commons last week. His promise of assistance amounted to an offer to try and induce the Admiralty to lend hulks for hospital purposes, an effort which may or may not succeed. The deputation would have liked better that he should have grasped the situation boldly, and acknowledged the indebtedness of the nation at large to the port sanitary authorities, and promised to consider at any rate if any monetary grant could be made to second their efforts. It is mere quibbling to say that the ports derive the whole of the advantages from foreign trade. It is not only not true, but it is unworthy of a minister of the Crown to say so.

Food and Sanitation.

SATURDAY, MAY 6, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE PARLIAMENTARY ADULTERATION COMMITTEE.

MAINLY, we believe, in consequence of the publicity we have given to the genesis and certain effect of Dr. Cameron's ill-judged effort at legislation on the pure food question, the efforts of the member for the College division of Glasgow to smuggle his Bill through the House on the pretext of getting it referred to a Select Committee have been frustrated. Watchful members who are as much interested in the food trade as Dr. Cameron, and perhaps more so, have objected to the dismissal of this important question to a Committee without due discussion and without an assurance that the Committee will be instructed to enquire into something more than the mere text of Dr. Cameron's faulty measure. The wily doctor doubtless thinks that he may some day catch his opponents off their guard, so he puts it down from day to day, but each time it is objected to. We hope the objections will continue to be made until the Government gives an undertaking that the Select Committee to which it will be referred shall be instructed to enquire into the whole administration of the adulteration of Food and Drugs Acts, including the Margarine Act, and the causes of their partial failure to punish wrong-doers.

Dr. Cameron professes to be desirous of freeing the retailer from prosecution, and to saddle the wholesale dealer and the manufacturer with the liability to prosecution for adulteration and substitution. We are with Dr. Cameron thus far. But what Dr. Cameron proposes to do and what his Bill does are two very different things. His permissive adulteration of butter with water, his warranties, and his coffee mixture labels are of themselves sufficient to damn his Bill before a Committee of impartial men; but there is that in his Bill which is even more dangerous than these attempts at condonation of adulteration: he absolutely permits the manufacturer to escape scot free. No wonder the public authorities are denouncing this iniquitous attempt to fetter the officers entrusted with the oversight of our food supplies and the detection of adulteration. If this Bill became law, not a single conviction of any kind could be obtained, and fraud and adulteration rampant as it is now, would increase tenfold. No manufacturer could be convicted under the Bill, and no wholesale trader, even if he lived in this country; and, as our readers know, he as often as not is a foreigner, who is out of reach of any British law.

If, therefore, any Parliamentary enquiry is to be useful, it must include an examination into the present means of administering existing Acts, and also, it must have some practical suggestions before it as to the means to be adopted to secure the conviction of the wholesale adulterating trader and manufacturer. We suggest the following as among the necessary heads of enquiry by a Parliamentary Committee, in order to secure a thorough review of the question:—

I.—The Compulsory enforcement of existing Acts. In this connection we suggest that evidence should be taken as to the negligence of certain local authorities, like Blackpool and Bury, to put the adulteration Acts into force, and the reasons. It ought to be made compulsory on all sanitary authorities to appoint inspectors and analysts to collect and examine food samples.

II.—The appointment of food inspectors. All such appointments should be sanctioned directly by the Local Government Board, and no inspector should be subject to dismissal without the consent of the Department. A provision of this sort is necessary in order to prevent these officers from being hampered in the performance of their duties by members of local authorities interested in the sale of food stuffs. The officers responsible for the administration of the Acts should be allowed to act on their own initiative without reference to any committee or other person except the legal adviser to the Board.

III.—The creation of an impartial court of reference in cases of disputed analyses. The habit of referring such disputes to Somerset House has now become discredited, owing to the inefficiency and inexperience of the chemists there employed, and their contradictory and inconclusive reports. We suggest that the President, Vice-Presidents, and Council of the Society of Public Analysts should be called to express their opinion as to the proper tribunal to be created.

IV.—The right of food inspectors to enter and take samples from the premises of wholesale dealers and manufacturers. This is a very necessary provision, and should embrace a power to examine consignments of foreign produce at the customs' ports of entry. Without such provisions any adulteration Act is bound to fail.

V.—The prevention of the use of substitutes for malt and hops by brewers, and the creation of standards of purity and strength for beer. The provisions of the Adulteration Acts require amending to this extent.

VI. The establishment of a proper milk standard. The present standard, known as the "Somerset House Cow," is too low, and a fair standard can only be arrived at by the collection of the opinion of the public analysts of the country.

These are a few suggestions which we have to make in support of our contention, that the reference to the proposed Parliamentary Committee should be full and exhaustive. Otherwise it will be useless for members to waste their time on the question. Dr. Cameron's Bill touches only the fringe of the matter, and, taken by itself, would lead only to the stultification of the law.

DR. CAMERON'S BILL.

FURTHER PROTESTS.

At their last meeting the Public Health Committee of Camberwell Vestry reported as follows on Dr. Cameron's Bill:—

"Your committee has considered the letter from the Vestry of St. Mary Abbott's, Kensington, enclosing the following resolution of its Public Health Committee:—

"That whilst the committee are in favour of the Sale of Foods and Drugs Acts being amended in certain particulars and to the wholesale vendor being brought within the scope of the provisions of the Acts, they consider that the present Bill as now framed is not sufficiently comprehensive in its character and would not effect its object so far as the wholesale vendor is concerned; and are of opinion that the amendment of the Acts should be given effect to only after the whole question shall have been fully considered by a Select Committee of the House of Commons."

Also letters from the Vestry of St. Mary, Islington, protesting against the Bill now in Parliament, to amend the Sale of Food and Drugs Act, 1875, and the Margarine Act, 1887; and from the Vestry of St. George's, Hanover-square, enclosing copy petition presented against such Bill. Your committee has also received a report of the public analyst on the subject from which it appears that if the Bill is allowed to become law a successful prosecution for adulteration will be almost impossible. Your committee recommends "That this Vestry agrees with the resolution passed by the Kensington Vestry, and that the views of the Vestry as regards the Bill be communicated to the members of Parliament for the borough, the members whose names appear on the back of the Bill, to the Local Government Board, and to the vestries and district boards of the Metropolis."

THE DERBYSHIRE COUNTY COUNCIL AND ITS PUBLIC ANALYSTS.

The Derbyshire County Council for years very imperfectly enforced the Adulteration Acts, and the effect of their supineness and that of other counties and boroughs upon English agricultural prosperity was from time to time pointed out in our columns. The neglect of the Acts was not the fault of the analysts, for the County Council was exceptionally well equipped as regards its analysts, having in Mr. A. H. Allen and Mr. Otto Hehner, scientists of the highest reputation, knowledge, and experience. We are pleased to see, therefore, that the Derbyshire County Council have resolved that in future the Acts for the repression of adulteration will be vigorously administered, but there is such a thing as honourable recognition of services rendered, and here we cannot but think the course proposed by the Derbyshire County Council is one that on consideration, the Council itself must confess is open to the charge of great unfairness. Mr. Allen and Mr. Hehner have for years served the county even more faithfully than the county cared to allow. The number of samples sent to both analysts have been inadequate and the remuneration low, but the ripened knowledge and acumen of both these gentlemen have been given to the benefit of the county without stint. Yet what do the County Council propose now that they have resolved to really enforce the Acts? If their resolve be correctly reported in the *Sheffield and Rotherham Independent* of April 13th, from which we extract the following, we must say their action appears to us exceptionally ungracious and shortsighted.

"The Hon. W. M. Jervis introduced the report of this committee, which recommended that Mr. F. A. Shortt, the assistant inspector of weights for the northern division of the county, be allowed an increased salary of from £80 to £120 per annum, conditionally that he devoted the whole of his time to the work. It was also recommended that an additional assistant at a salary of £1 per week, exclusive of travelling expenses, be appointed. The report went on to state:—"Considerable attention has been given by your committee to the question of the taking of analyses throughout the county. It is not considered that the present arrangements are at all satisfactory, and it appears to your committee that it would be desirable, instead of employing two county analysts as at present, that a skilled analyst shall be appointed by the county at a salary not exceeding £400 per annum, exclusive of travelling and other necessary expenses, who shall devote his whole time to the duties of his office. This course is recommended to the Council, and, if approved of, your committee would further recommend that six months' notice to determine their present engagements be now given to Messrs. Hehner and Allen, and that your committee be instructed to prepare a scheme for carrying out their present proposals, such scheme to be presented to the Council at their July meeting." The Chairman said he had during the course of the meeting received telegrams from Messrs. Hehner and Allen, who thought it unfair that they should be given notice unheard, and feared that it might injure their professional reputation. The Hon. W. M. Jervis said those telegrams had evidently been sent under a mistaken idea, as there was not the slightest desire to reflect upon the reputation either of Mr. Hehner or Mr. Allen. They were both, no doubt, eminent men in their profession, in proof of which he might state that they were both ex-presidents of the Society of Public Analysts, and they unquestionably had the confidence of the committee. The difficulty was that they both lived some distance away, Mr. Hehner's place of business being in London, and Mr. Allen's at Sheffield, and it was thought that if they had an analyst engaged exclusively for them it would be much more satisfactory. He had no doubt that if either Mr. Hehner or Mr. Allen chose to apply for the new position they would stand a very good chance of getting it. Alderman Sir J. Alleyne, Bart., seconded, and said it was the feeling of the committee that the number of analyses at present taken were by no means sufficient to protect the county from food adulteration. A long discussion followed, and a feeling seemed to prevail that a really suitable analyst could not be obtained for £400 a year. Mr. Wragg moved, and Mr. Fowler seconded, an amendment referring the matter back to the committee, but subsequently withdrew it, and the committee's report in its entirety was adopted."

It may be that the council has the power to thus dismiss, without the shred of an excuse, its present analysts; but if that be the case it does not alter the fact that it is unusual to so deal with two public servants who have deserved well of the County and the Council. The residence of Mr. Hehner in London, or of Mr. Allen in Sheffield, has been hitherto no barrier to the satisfactory performance of the analyses entrusted to these gentlemen, nor would it be were the number of samples sent to each to be as adequate in number as they have been heretofore inadequate. To assume that for £400 per year the Derbyshire County Council could secure the services of an analyst of a capacity in any way equalling that of their present officers is absurd. That they can for that salary engage an analyst is true, but that the exclusive services of any one analyst who would engage himself for such a salary could in any way approach in value those of Mr. Allen and Mr. Hehner, were the salary divided between these officers, no one thoroughly con-

versant with the difficulties of food analysis and the ever changing nature of fraud in food stuffs, and with Mr. Hehner and Mr. Allen's long and honourable record and their unquestioned eminence in their profession would admit. There is, moreover, the question of ordinary gratitude. The able and far-seeing reports of Mr. Allen and Mr. Hehner have possibly more than anything else been the cause of the council recognising the serious damage done to agriculture by the non-enforcement of the Food and Drugs Acts. Officials whose public spirit produces such beneficent action deserve encomium rather than what we cannot but regard as being unfair treatment, unintentional though it may be; and we think, in justice to its present officials, the council ought first to see how the present system would work by increasing the number and variety of the samples. We notice that the County Council dispersed without giving a moment's consideration to Dr. Cameron's Bill, which would render the work of a public analyst useless, and make free fraud in food stuffs universal. Such, unfortunately, is the shortsightedness of county councils, who strain at a gnat and swallow a camel.

ANOTHER IMPORTANT LARD PROSECUTION.

MESSRS. KILVERT SUMMONED.—CASE DISMISSED.

At Wycombe Borough Petty Sessions on the 12th ult., Messrs. Kearley and Tonge, of Mitre-square, Aldgate, E.C., trading as the International Tea Company, in White Hart-street, were summoned by Supt. Sparling as inspector under the Food and Drugs Act, for selling 1lb. of adulterated lard on February 15th. Mr. A. J. Clarke appeared for the prosecution, and Mr. Edgar, of Manchester, appeared to defend. Mr. Clarke opened the case at some little length, and said he would call the public analyst first, as he had another engagement in London.

Charles Edward Cassal, of London, public analyst for the borough of Wycombe and other places, vice-president of the Society of Analysts and Fellow of the Institute of Chemistry, and the Chemists' Society, said he had had large experience of food and drugs, and had analysed a considerable number of samples of lard. On the 16th of February he received a sample of lard from the borough of Wycombe, marked with the letter "J" and as being purchased on February 15th, 1893. The sample was properly sealed. He analysed it, and certified to the head constable on the result. He produced the certificate, which stated that the lard was adulterated with 0.6 per cent. of water, equal to 42 grains, or little more than five-tenths of one per cent. Genuine lard should contain no water. By the Bench: The purchaser was prejudiced by getting a certain amount of water, instead of the lard he paid for. He could not give any opinion as to whether the presence of water was prejudicial when the lard was required for medical purposes. Cross-examined: It was a commercial question as to how far the presence of the 170th part of water in the lard affected the purchaser. He had only analysed lard as lard and not as rendered or refined lard. He knew nothing of the process of refinement of lard. He found no impurity in the sample of lard in question beyond the water. The process he used to detect this was as follows:—He weighed out a portion, after having carefully mixed it up. He then placed it in a water bath and melted it, and when the whole of the water it contained was driven off he re-weighed it, and thereby obtained the difference in weight. Under the conditions of his experiment nothing could have been driven off to an appreciable extent but water. He saw the water during the experiment. He did not find water deposited at the bottom of the vessel. He had heard that lard was largely refined in Liverpool. Do you know, asked the solicitor, that it is almost solely refined in Liverpool, Manchester, and America? Yes, and adulterated too. Mr. Edgar said this was a most improper remark, and it would have been better had the witness not made it. Cross-examination continued: He could not say that the water in the lard would set up an injurious action. In a report he published on the subject he said that the presence of membranous matter in lard could not strictly be called an adulteration. This he stated because the membranous matter came from the pig, and was not added. Water might be added. There should be no water in lard properly made. By far the large majority of samples he had analysed contained no water. He did not say that water should not be used in the process of manufacture.

For the defence, Mr. Edgar called Nicholas Kilvert, manager of the Kilvert Lard Refining Company, who stated that the refining of lard in England was practically confined to Manchester and Liverpool. Imports from America were often adulterated. His firm had always done their utmost to keep up the purity of lard, and had helped the public analysts in the adulteration. Witness described the process of refinement, in which water was largely used, and upon which his firm had spent a very large amount of capital. He knew of no process in any country for extracting water from lard except settling. To apply such heat as would take out every particle of water would destroy the lard. The lard made by his firm was required to be used in many hospitals and dispensaries. He never knew of any prosecution for the presence of 0.6 per cent. of water in lard. He believed it was impossible to get all the water out of pure refined lard, and should not consider it adulterated if it contained 1 per cent. There was a difference between refined and home-rendered lard. He did not agree that pure refined lard should contain no water. Cross-examined: If there were one per cent. of water in lard he should consider it practically pure. He never used analytical tests. His firm

supplied the lard in question to Messrs. Kearley and Tong. He could not swear this, but defendants had given them chapter and verse.

Joseph Carter Bell, public analyst for Cheshire, and for several towns, said he was practically acquainted with the refining of lard, and had had large experience of testing lard for impurities. He knew Kilvert's process, which was as complete as it could be made. He had a sample of lard bearing the seal of the Wycombe police from Mr. Kilvert. He sent part of it to Dr. Campbell Brown, and analysed the other. His process of analysis was similar to Mr. Cassal's, and he should have passed it as pure, because there was no appreciable quantity of water. As an analyst he should pass lard with 0.6 per cent. of water in it as pure. He never knew of a prosecution for such an amount. To completely drive off every particle of water would require such heat as to spoil the flavour of the lard and run the risk of burning. It was impossible to drive off 0.6 per cent. without the same result. Cross-examined: There was a loss of weight when he heated the sample, .55 per cent., but so slight that he could not take any notice of it. He did not carry the investigation further. Properly made commercial lard ought to contain about half of 1 per cent. of water. Mr. Griffiths asked the witness if there was any difference between commercial lard and pure lard, and witness said there was not. Cross-examined further: In the sample he examined there was a slight cloudy appearance when first heated. This was due to moisture.

Dr. James Campbell Brown, public analyst for the City of Liverpool for twenty years, analyst for the county of Lancaster, &c., said he had analysed some thousands of samples of lard. He had been obliged to make a special study of lard for the last ten years, owing to the great adulteration in America and by some smaller firms in England. He was acquainted with the process of refining lard adopted by the large firms. Kilvert's firm was known as making the best refined lard. Water or steam or both were employed in refinement. Dry heat could be applied so as to draw off all the water—not the minute particles in the lard. It was a scientific fact that minute particles of water in oil would not boil at the ordinary temperature. He asserted that the refiner could not completely draw off all moisture. A minute proportion of moisture, not actual drops of water, was incidental to the best lard. He considered that most refined lard contained as much as 0.5 or 0.6 per cent. of moisture, and he was certain that 1 per cent. would not be fraudulent. If there was 2½ per cent. of water he thought there should be a conviction, because it showed fraud or gross carelessness. The water was not injurious to health. It was introduced to take away natural impurities, and as a matter of fact decreased the weight and measure. For 0.6 per cent. of water he certainly should not prosecute. He analysed the sample sent him by Mr. Bell, and there were traces of moisture, but he could not separate it as water. He put a little of the lard in a test tube, and no water fell, and in cases where there was not sufficient to fall in this way the amount was so small that the manufacturer could not remove it. Cross-examined: He examined samples of lard that had no water whatever, but generally this was inferior lard, though often good commercial lard. Once or twice he had had water-refined lard absolutely free from water. Mr. Vernon asked the witness if he could tell what profit the introduction of the amount of water in this case would yield. Dr. Brown replied that it would be one-twentieth of a penny on a pound of lard, but it would cost more than that to put it in, and further this half per cent. occupied the place of 1½ per cent. of impurities, so that they had to deduct three-twentieths of a penny from the one-twentieth, and the manufacturer of course had a balance the wrong way. The lard in question was as pure as it could practically be.

The Mayor, after the Bench had consulted for a short time, said it was the unanimous decision of the Bench—and they were so seldom unanimous that he was pleased to mention it—to dismiss the case.

Mr. Edgar said he had received much assistance from the Bench. It was not often they got so much light thrown on a case by the magistrates, and he was much obliged to them.

Mr. Griffiths said the Superintendent was quite justified by the course he had taken, and there was no blame attaching to him. The matter had been properly investigated, and doubtless the public would be satisfied with the course the Bench had taken.

There was a summons against James Chalk for a similar offence on the same date, but Mr. Clarke said the water found in the lard in this case was only 0.8 per cent., and therefore he would withdraw it. Mr. H. Moreton Turner, of Watford, who appeared for the defendant, said he bought his lard of a well-known firm, and did not do anything to it.

At Jarrow, on the 20th ult., the local co-operative society were summoned in respect to a pound of lard, which was certified as containing 5 per cent. of beef fat. A fine of 20s. and costs was inflicted. A similar penalty was ordered to be paid by John W. Faulkner, charged with selling lard adulterated with 10 per cent. of beef fat; while a summons against the North of England Trading Company, also on a charge of selling adulterated lard, was dismissed.

Walter Edwards, provision dealer, St. Peter's-street, Leeds, and also carrying on business at Farsley, was, on the 27th ult., summoned under the Food and Drugs Act for having sold a pound of adulterated lard to Mr. J. B. Walker, food and drugs inspector to the Leeds Corporation. Mr. C. C. Jolliffe, Deputy Town Clerk, who prosecuted, said the lard contained 51 per cent. of foreign fat. When told by the inspector that he had purchased the lard for analysis, defendant said, "It isn't lard; it's lardine." It was stated on defendant's behalf that he was giving up business, and that a meeting of his creditors was being held this forenoon. Mr. Bruce imposed a penalty of 50s., including costs.

CIRCULAR NOTES.

ADULTERATION IN IRISH MILK.

IRISH farmers have long had an unenviable notoriety for adulterating their milk. We have had complaints made to us again and again, of the unsatisfactory nature of transactions with Irish farmers in the purchase of milk and butter both. The complaints with regard to butter we have dealt with before, and may have to deal with again: but the evil as regards milk is equally grave. We were told recently by a butter factor in this country that he had had to give up buying milk and cream altogether from Ireland, as he could not rely on it at all. He could not get pure milk or cream twice together from any one farmer. This serious allegation seems to be borne out by the experience of Mr. T. E. Bennett of Kilmallock, who wrote a letter on the subject to the *Cork Herald*. He says:—

"There is no doubt that a large percentage of the milk sent to creameries all over the country is adulterated, or in some way robbed of its richness. Somebody tells us that 20 per cent. of the farmers are dishonest. I would put it much higher, as I think just men are in the minority. Creameries have tolerated this too long and to too great an extent, and contented themselves with telling those farmers, that their milk was poor, etc. The reason is probably because they either think they would lose them as suppliers if they treated them harshly, or they are afraid of hurting their feelings. There is no fear of the latter, and I fail to see how they are useful as suppliers. The evils which accrue from such wholesale deceit are disastrous to the creamery system itself, to the interests of the proprietors, and to those of the honest farmers who are supplying them."

Mr. Bennett suggests that such rogues should be fined by the creamery companies, and their names communicated from one creamery to another. A more effectual way would be to analyse every consignment of milk, and to ask the police to prosecute in every case.

DURHAM COUNTY COUNCIL AND THE WARRANTY QUESTION.

The many grave miscarriages of justice that have arisen by the production by defendants of warranties in adulteration cases, show that a certain class of traders have adopted as a motto "plunder the public but do it under a warranty that the law may not punish you." The scandalous abuses of the "warranty" system are thus instanced by Mr. B. Scott Elder in his report to the Durham County Council:—

"The bench" says Mr. Elder, "were of opinion that the article had been adulterated, but, as the warranty had been placed before them they could only levy upon the defendant the amount of costs in accordance with section 25 of the Act. This is the first written warranty which has been produced in this county for some years, and in view of its importance, I ask for instructions as to taking proceedings in the matter against the wholesale traders for the issue of a false warranty."

It is gratifying to know that the Durham County Council not only appreciate the gravity of the question, and the method by which "warranties" are used to permit fraud upon the public, but they have determined to make an example of givers of false warranties. At their last meeting they agreed to the following resolutions:—

"That the Chief Inspector of Food and Drugs be authorised to take such steps under the Food and Drugs Acts against wholesale dealers for the issue of false warranties as he may deem prudent."

This resolution is a very good one, and much needed for the public protection.

COCOA PROSECUTIONS IN ABEYANCE.

At Keneton Petty Sessions last week Mr. Bennett had taken out a summons against a person for selling him a packet of adulterated cocoa, but it was withdrawn pending the decision of a case upon the point now before the Law Courts. It is surely time something was done to expedite the hearing of these appeals. Whilst they are held over fraud is flourishing.

MORE SOMERSET HOUSE BLUNDERING.

At a meeting of the Drogheda Corporation on the 19th ult., the town clerk said, in reply to his query put to Somerset House in relation to the prosecution against Mrs. Waters for alleged impure milk—"Was the milk pure, as yielded by the cow, or was anything extracted from it?"—he had received the following reply:—"In my opinion the sample was not genuine milk, but that at least 13 per cent. of fat had been removed therefrom." Mr. Jordan, one of the members, said he thought the previous analysis from Somerset House, in which it was stated the milk was good, had some influence on the Bench in dismissing the case with costs against the Corporation. If the Bench had the explanation read to-day before them they probably would not grant £1 costs. Several members expressed dissatisfaction at the manner in which the analyses are made.

We recently saw two certificates given by the Somerset House chemists in which the carelessness was such that the figures, although purporting to total to 100, only totalled 99.8, and yet

upon slovenly certificates of this kind accurate certificates by real scientists are condemned as incorrect. It is evident that in addition to requiring tuition in elementary chemistry the Somerset House referees also need a course of lessons in simple arithmetic.

MR. W. S. GILBERT AND THE ADULTERATION ACTS.

We have long known Mr. W. S. Gilbert, as the apostle of a topsyturveydom, delightful enough in its proper place on the stage in a theatre, or in Bab-ballads; but the irrationality that is charming in "The Palace of Truth," "The Gondoliers," and in many others of Mr. Gilbert's nonsensical creations, is not only not charming on the Bench, but is an emphatic nuisance, besides being injurious to the public. At Edgware Petty Sessions Mr. Gilbert in a case wherein a Somerset House certificate was produced to shield adulteration, made a remark that "It was all very well to say there was a dispute between Somerset House and the county, but it was very much like a conflict between the Edgware Petty Sessions Court and the Lord Chief Justice."

There is a rich idiocy about this opinion of Mr. Gilbert's that we doubt not will cause our readers to smile. A more unfortunate or ridiculous comparison it would be hard to make. We have week by week shown that Somerset House analysts know nothing of food analysis, and that it is not only an insult but a grave scandal that capable scientists should have their certificates disputed by pseudo-analysts, who say one day that butter is genuine and the next proclaim the same butter to have 70 per cent. of margarine in it. In this case the County of Middlesex analyst's certificate was rejected in favour of one from the incompetent Somerset House department, and the County Council were mulcted in heavy costs. No doubt Mr. W. S. Gilbert in uttering his absurd comparison believed that scientifically, Somerset House occupies in comparison with individual analysts a position as high as that of the Lord Chief Justice compared with an individual member of the great unpaid. But the eminence of the Lord Chief Justice has been gained by the display of brilliancy as an advocate and of sound knowledge of the law. He has climbed to the Lord Chief Justiceship by sheer ability. Who is there that would say that the Somerset House analysts have ever in any way shown that they know anything accurately of food analysis? We venture to say no one could be found to advance so unwarranted a claim for them. Dr. Bell's milk analyses have been the laughing stock of scientists since they were published. Somerset House, as we show in another portion of our journal, are even now giving certificates that do not total correctly, and show ignorance of even elementary arithmetic. One hundred and twenty representative scientists, including every analyst of eminence in the kingdom, have protested against the misleading, unscientific nature of the Somerset House analyses and certificates. The leading medical journals have endorsed that protest as being necessary and well-grounded. We need give no further proofs of the absurdity of Mr. Gilbert's comparison. It is a matter for grave regret that so many magistrates, without consideration or desire to really know the facts, should regard the department as an overriding scientific authority. The prevalent misconception as to what Somerset House really is, leads to many miscarriages of justice even worse than that at Edgware, and if the Somerset House scientific imposture were abolished lock-stock and barrel to-day, to use Mr. Gilbert's own words, "it never would be missed," whilst its abolition would save the public millions of pounds yearly, now lost to England by Somerset House fraud-encouraging certificates.

MR. ENDERLY HANDSLEY AND THE WARRANTY AGAIN.

At Woolwich Police-court, Enderly Handsley, trading as the Callow Park Dairy Company, was summoned by the Plumstead District Board of Works for selling milk from which 26 per cent. of the cream had been abstracted. Mr. Whale prosecuted, and called Mr. Welsh, the Board's inspector, to prove the purchase from one of the defendant's milk carriers, named South. Mr. Ricketts appeared for the defendant, and pleaded that the milk was sold in the same state in which he received it, and that it was warranted by the farmer, Lord Rayleigh, Lord Lieutenant of Essex. Defendant produced the written warranty, signed by Lord Rayleigh's London agent. He had the same milk analysed, and it was reported as "milk of poor quality." Mr. Marsham dismissed the summons.

This warranty defence has grown to be a grave public scandal, and if Lord Rayleigh be responsible for this adulterated milk, then the Plumstead District Board should proceed against him. The offence is plain enough. Adulterated milk is sold to the injury of the public. Mr. Handsley escapes on the warranty, and no one is punished. It is high time the scandal was dealt with vigorously, and as the Board have the power to proceed against the giver of the warranty, they should for the public protection hasten to take the necessary steps.

PUBLIC HEALTH NOTES.

Last week's Registrar General's returns show that the smallpox epidemic, besides those killed by it in London, has caused the deaths of persons in Birmingham, in Manchester, in Halifax, in West Ham, in Oldham, in Burnley, in Leeds, and in Sheffield. But the mortality has so far been very light. Even in London, where the epidemic has now assumed serious proportions, the deaths have been comparatively few; but there has been a constant increase in the number of cases under public treatment. On Saturday week there were 450 variolous patients in the smallpox wards. A month previously the cases of this disease numbered only 263. The epidemic is spreading, therefore, with rather alarming rapidity.

Some controversy has again arisen on the action of the Leeds Corporation in countenancing the continued erection of back-to-back houses for the working classes. The danger to the health of the inhabitants of such houses is undoubted, and it cannot be understood why their erection is tolerated, unless as is pertinently suggested by a correspondent of the *Yorkshire Post*, the majority of the Municipal Building Committee are builders, some of whom may be interested in the building of this class of dwellings by private owners.

A report on the "Rookeries" and "Plague-spots" of Colombo has been drawn up after careful personal inspection by a Sinhalese member of the staff of the *Ceylon Observer*. He reports that the small dwellings, houses and huts in several parts of the town are certainly a source of danger to the public health. They are built in such an insanitary way and crowded together that the air is contaminated with the foul smells emitted from the dwellings. The sweepings of many of these places are heaped up in the immediate neighbourhood, and the other arrangements of the dwellings are such that foul smells generate about the locality. No proper arrangements for latrines for the houses are provided by their owners, and the occupants are said to frequent the municipal latrine in the neighbourhood, but what about the children. They generally are allowed to make their calls of nature in the houses or in the compounds, and, the fecal matter is thrown into the nearest drain or the nearest get-at-able place. The habits of the occupants of these dwellings are known to everybody.

The lower orders of Tamils and Sinhalese never know or take any notice of sanitary laws or rules, and are quite indifferent to the advice given them. The owners of these places take no notice of this disgraceful insanitary condition, their interest ceases when the rents of these hotbeds of disease is paid to them, which in many places range from 50 cents to 3 or 4 rupees. Most of these dwellings are inhabited by the poorest low class of Tamils, Sinhalese, Coast Moormen, &c., who do not take any notice of sanitary laws. They are quite indifferent to the kind of air they breathe or the spots where they live.

Some of these houses, though small, could have been brought under better sanitary conditions if the landlords had thought of it, but they themselves are as indifferent as the occupiers to sanitary laws.

Much consternation was caused at Evesham last week when it became generally known that several persons were suffering from the effects of eating bad meat. It appears that a butcher of Oddington, near Stow, on Saturday last brought a quantity of beef into the town, which he disposed of at a much lower price than is ordinarily charged. Among the purchasers of the meat were Mr. H. Stanley, landlord of the Oxford House Inn, and Mr. Dawes, a working jeweller, in the employ of Mr. D. R. Simms. In both cases the whole of the family were on Tuesday seized with violent pains with almost incessant vomiting and diarrhoea. The remains of the meat were taken possession of by the sanitary inspector with a view of instituting a prosecution of the vendor. We hope he will be found. The number of cases in which putrid meat is sold with impunity is growing seriously.

We wonder if it is true, as suggested by a correspondent of the *Dundee Courier*, that a wizened half of a bullock's heart, two shaws, and three to four pounds of old suet or tallow placed in a mincer after being chopped up, with a few spoonfuls of sheep's blood and two spoonfuls of "Madame Rachel," as a certain chemical fluid is termed, makes good fivepenny mince for the poor; and a stale loaf of bread steeped in water overnight added to the mince mixture, with a piece of carrion or slink added, then seasoned with pepper and salt, and an extra spoonful of blood makes pretty specimens of sausages. If this sort of thing is done we agree with the correspondent that the time has now arrived for energetic action being taken to appoint practical men for the inspection of not only the meat at the market, but of the premises of retailers of beef in the city.

The *New York Herald* is of opinion that there ought to be some law compelling persons who cut ice for sale in that city to take it only from waters which are in a fit sanitary condition for consumption. Too much foul ice comes to New York.

The Cardiff Corporation is taking prompt action to deal with any possible importation of cholera. They have hired the tug *Champion* at the rate of £30 per week; permission has been obtained to erect a temporary hospital on the deck. The tug will be exclusively for the use of the port sanitary authority whenever they want it, night or day, from May 1st. Besides the deck house, she will be fitted with temporary disinfecting tanks, &c.

The county sanitary inspector of Melrose reports that the drains at Newtown, in that district, are a source of danger to the health of the public. At Melrose the sewage in the Wilderness and along the road opposite St. Dunstan's and through the Greenyards is very foul and unsatisfactory, and should be opened out, cleansed, and relaid, provision being made for manholes and ventilation, and the gradients increased, so as to carry away the sewage more readily than is the case at present. Dingleton Burn is the outlet for sewage from 89 houses, containing a population of 391 persons. Many of these houses are in a very insanitary condition, and from this cause, together with the over-crowded state in which they are found, cannot fail to affect injuriously the health of the inmates. Thirty-six of the dwellings have water-closets, mostly of a bad kind, but 63 are without ashpits, and everything is thrown into the burn. Five of the houses are "dairies," from which milk is sold in considerable quantities.

THE CAMBERWELL VESTRY CONDEMNS SOMERSET HOUSE.

The Public Health Committee of the Camberwell Vestry at their last meeting, reported that they had received a letter from the Society of Public Analysts enclosing a copy of correspondence between that society and the Principal of the Inland Revenue Laboratory at Somerset House, and copies of resolutions passed by the society at a special meeting on the 15th February last, which are as follows:—

- (i) That amendment of the laws relating to adulteration is urgently required.
- (ii) That the present Acts often operate unfairly on the retail traders, and that provision is necessary to ensure in many cases of adulteration the prosecution of the real offenders.
- (iii) That in view of the fact that, as is shown in the Local Government Board Reports, the Food Acts are practically dead letters in a large area of the United Kingdom, it is necessary that adequate provision be made for securing uniformity in their application and in their due enforcement.
- (iv) That in order that the Local Government Board should have better control over the working of the Acts a portion of the expenses of working them should be borne by the Imperial Revenue.
- (v) That in view of this it is desirable that there should be a duly constituted Chemical Department of the Local Government Board, with whom the public analysts as officers of the Local Government Board, should be placed in direct relation.
- (vi) That the present system of reference in the case of disputed analyses is unsatisfactory and ought to be entirely remodelled.
- (vii) That the compulsory combinations of the two offices of medical officer and public analyst is in the public interest undesirable.
- (viii) That provision should be made to ensure better than heretofore the proper qualification of officers under the Act.

After full consideration the Camberwell Vestry resolved that the Society of Public Analysts be informed that this Vestry agrees with such resolutions.

MACKEREL.

At Birkenhead Police-court, on the 21st ult., Jane Finlay, 55, Brook-street, was summoned for having sold five mackerel which were unfit for food. Mr. Bromfield, Deputy Town-clerk, prosecuted, and called evidence to show that five different mackerel sold for defendant by a boy were bad. Mr. A. F. Moore called Mr. Matthew Duncan, of Messrs. J. Duncan and Sons, fish merchants, who stated that the fish were perfectly fresh when sold to defendant on the morning of the 11th, and within a few hours they were all sold in Birkenhead. He could not possibly believe that any of the fish had gone bad so soon, for he sold several boxes of the same lot on the following day.—A fish inspector from Liverpool corroborated, and a number of persons who had bought fish from the same box stated that they were very good.—His Worship said he had no doubt the matter was accidental, and he would impose a fine of 1s. and costs.

ADULTERATION PROSECUTIONS.

MILK.

At the Birmingham Victoria Law Courts before Sir James Sawyer, on the 14th ult., Charles Mitchell, of Bank Farm, Woore, Shropshire, was summoned for adulteration of milk. Mr. Davis, inspector under the Food and Drugs Act, stated that on March 24th he took a sample of milk at New-street railway station, in course of delivery from the defendant to William Claridge, milk dealer in the city, and submitted same to Dr. Hill, public analyst for analysis, who gave a certificate to the effect of 6 per cent. of added water, and 10 per cent. of fat less than natural. The inspector also said that he took two samples, one of evening's milk, and one of mornings; the morning's milk in the analysis proved to be pure. Sir James Sawyer asked if the inspector had reported this case to anyone. Mr. Davis: Yes; to the Health Committee. Sir James: And have the Health Committee authorised you to prosecute in this case? Yes. The defendant said his son managed the business, and offered no other defence. Sir James Sawyer said he should dismiss the case on account of the smallness of the offence.

At the Southampton Borough Police-court, on the 15th ult., before Mr. G. P. Perkins and other magistrates, William Henry Tilbury Scamell, farmer, of Fullerton, was summoned under the Food and Drugs Amendment Act, 1879, for supplying milk not of the nature, substance, and quality of milk, but which had been adulterated by the addition of water, on the 9th March. Mr. R. S. Pearce (Town Clerk) appeared for the prosecution, Mr. W. L. Bell defended, and Mr. Lamport watched the case on behalf of the Southampton Dairy Company. Mr. Pearce said there were two charges against defendant in respect of two samples of churns of milk. Defendant was under contract to supply pure milk to the Southampton Dairy Company. William George Powell, one of the sanitary inspectors under the Corporation, stated that on the 9th March he was at the Southampton Dock Station, with others, at 7.30 p.m. He saw the Andover train come in. Two churns were pointed out to him by Mr. Pocock, and upon the churns were the labels produced. The churns were consigned to the Southampton Dairy Company. At witness's request, Mr. Pocock opened the churns, and witness took a sample, sealed it, and took it to the public analyst. He had since received certificates from Mr. Brierley. Mr. Pearce read the certificates, dated March 14, which stated that the samples (two) contained respectively ten and eight parts of added water in every 100 parts. The cans, it was stated, in answer to the Bench, contained fifteen and twelve gallons respectively. Cross-examined: The churns were placed on the platform by Solomon. Witness took possession of them. Mr. Pearce having replied, the Court was cleared for the magistrates to deliberate. On the re-admission of the public, Mr. Chipperfield having meanwhile retired from the Bench, the Chairman, addressing the Town Clerk, said a majority of the Bench were of opinion that no evidence of contract had been brought before them. The case, therefore, fell through. Alderman Rogers: I may state that one of the magistrates left the Bench before our adjudication took place. I must distinctly avow I think the evidence the clearest I have heard in my life, and I entirely dissent from the decision of the majority (Messrs. Perkins and Hodgson). Mr. Lamport pointed out that the South Hants Dairy Company had been mentioned by mistake. They had nothing to do with the matter, and were anxious that should be known. The Town Clerk asked for a case, and, after some remarks, permission for this was granted.

At the Southampton Police-court on the 14th ult., Thomas England, milk seller, 4, West-street, was summoned by inspector Powell, under the Food and Drugs Act, for having in his possession, on March 23rd, milk from which a portion of the cream had been abstracted. The inspector proved the purchase, and the Town Clerk read the certificate of the public analyst, who stated that the sample had had 33 per cent. of cream removed. Defendant said he had been supplied for many years from the same people, and never had cause of complaint. The Bench imposed a fine of 20s. and costs, defendant being told he had his remedy against the person from whom he got the milk.

John Rusholme, milk seller, residing at No. 29, Price-street, was summoned under the Foods and Drugs Act at York, on the 17th ult., for selling milk from which the cream had been abstracted. The Town Clerk prosecuted, and stated that on the 21st of March the defendant was engaged selling milk in the streets. Mr. Atkinson met him, and asked for and was served with what purported to be a pint of new milk, for which he paid 1½d. The prosecution did not allege that anything had been added to the milk or that it had been adulterated in any way, but that it was not of the quality demanded by the Act. The offence they alleged was not adding water to the milk, but abstracting something from it, in fact the cream had been abstracted, and defendant was selling as new milk what was practically skimmed milk. A sample of the milk purchased by the inspector was submitted to the public analyst, who certified that 14 per cent. of the fat had been removed. Joseph Atkinson, inspector under the Foods and Drugs Acts, gave evidence bearing out the Town Clerk's statement. Defendant said that he was innocent of any offence, and sold the milk just as he bought it from the dairy. The Bench imposed a fine of £1, and the costs.

At Rotherham, on the 17th ult., John Adsetts, milk dealer, was charged with contravening the Food and Drugs Acts by selling adulterated milk, at Swinton, on the 14th March. Mr. Wilson, inspector of the West Riding County Council, produced the analyst's certificate, showing that one-third of the butter fat had been extracted from the milk, and that it had been mixed with 10 per cent. of water. Defendant did not appear. He had been fined twice, £3 and costs in

1877, and 20s. and costs in 1885, for a like offence. The Bench now inflicted a penalty of £5 and costs, and allowed the analyst's costs.

At Middlewich on the 14th ult., Joseph Burrows, farmer, Middlewich, was summoned for consigning adulterated milk to Robert Roylance, milk dealer, St. Helen's. Mr. W. Knowles (Widnes) appeared for the defendant. Inspector Steel took samples of the milk arrived by train at St. Helen's for the local dealers, and a sample from one of defendant's cans was certified by Dr. Campbell Brown to contain 17 parts of water to every 100 parts of the poorest milk. The defence was that no water at all had been added to the milk, and its poor quality was attributed to the condition of the cow. The Bench imposed a fine of 10s. and costs. The man Roylance was summoned for selling adulterated milk, but the case was now withdrawn.

BUTTER.

At Cheltenham police-court, on the 13th ult., John Kirkham, grocer, was summoned under the Food and Drugs Act, for selling butter, such butter containing 90 per cent. of fats other than butter fats. He was also summoned under the Margarine Act for neglecting to attach a label to the said margarine.—Mrs. Elizabeth Berry, 1, College-terrace, said she went to the defendant's shop on the 21st March, and asked for a pound of butter. She was served by Mrs. Kirkham, and 1s. was tendered in payment. At the time of purchase P.S. Sansom took the butter out of witness's hand. There was no label on the butter.—Cross-examined: The money tendered by witness was not her own. She was provided with money by Supt. McRae on this occasion. Witness had often bought margarine from Mr. Kirkham during the last twelve months. She visited the defendant's shop at about 8 or 9 o'clock on the day in question. She had just previously been to other grocers' shops engaged on the same errand. Witness did not notice the dish from which she was served, nor did she notice the word "Margarine" imprinted on the dish. On entering Mr. Kirkham's shop, she asked for "a pound of shilling butter." Witness did not know whether it was possible or not to get good and pure butter for a shilling a pound.—By the Bench: Witness had sometimes bought margarine at 10d. per lb. from the same shop.—P.S. Sansom, of Bristol, an inspector under the Food and Drugs Act, said he sent the last witness to Mr. Kirkham's shop. He heard her ask for a pound of butter. He saw that she was served, and immediately took it into his possession. Witness told Mr. Kirkham that he was a police officer and intended to have the sample analysed. Mr. Kirkham said "You need not part the butter; I know we have made a mistake. It is done and can't be helped." Turning to Mrs. Kirkham he said: "It is you who have done that. If you had wrapped it in a margarine wrapper it would have been all right." Mr. Kirkham afterwards said: "Look you Inspector, you see it's margarine; it's marked on the dish." He told defendant that a label should be attached to the margarine.—Supt. McRae at this stage wished to cross-examine the witness Sansom, but Mr. Wagborne urged that the prosecutor was Sansom, and Supt. McRae had no *locus standi* in the case. The Bench upheld this objection.—In reply to Mr. Wagborne, witness said he overheard the conversation between Mrs. Berry and Mr. Kirkham. He was sure Mrs. Berry asked for shilling butter. To a purchaser entering the shop, the word "Margarine" engraven on the slab would not be visible, unless such a purchaser purposely inspected the slab. On that day, witness had bought butter for a shilling a pound, which on analysis turned out to be pure.—P.S. Dobbs said he received the alleged butter from the witness Sansom, and handed it over to the public analyst.—Mr. Wagborne, for the defence, contended that the authorities had acted in almost direct defiance of the well-known and specific provisions of the Food and Drugs Act. Sansom was not, he said, the purchaser and had therefore no right to lay any information, stating that he had been "prejudiced" in the words of the Act. Mr. Wagborne then proceeded to deal with certain technical objections. The butter, he said, had not been divided into three portions as directed by the Act, nor had the analyst's certificate been properly made out. Going on to comment on the evidence of the witness Berry, Mr. Wagborne said she had doubtless been well primed—an expression which drew forth remonstrance from the Bench, as being unfair towards the police. The Margarine Act had clearly, he said, been complied with, in the fact, that the dish whereon the margarine was placed, bore the word, "Margarine."—Mr. John Kirkham, the defendant, said a purchaser must necessarily see the word "Margarine" imprinted on the dish.—Defendant was fined £5 on each charge—£10 in all.—Mr. Wagborne asked the Bench to state a case for a higher court, and to stay execution.

Elizabeth Day was summoned for a similar case.—Mr. J. Wagborne defended.—Fined £1 in each case and costs.—Martha Ellen Smith was summoned under the Food and Drugs Act.—Fined £1 and costs.—Jane Capper was summoned under the Food and Drugs Act and the Margarine Act.—Fined £1 in each case and costs.—John Blackmore was also summoned under both Acts. Evidence having been called on both sides, defendant was convicted under the Margarine Act, and was fined £1, and costs.—Tom Ody was similarly summoned.—He pleaded guilty, and was fined £5 on each charge, and expenses.

PEPPER.

At Camberwell, on the 26th ult., G. W. Taylor, of Tulse-hill, was summoned by Mr. T. H. Wiggs, on behalf of the Lambeth Vestry, for selling pepper containing rice flour to the extent of 50 per cent. The defendant admitted the sale, but said he bought it as genuine pepper, and sold it as he received it. Mr. Biron said that was no answer to the summons, although the defendant might have a right of action against the man who supplied him. He ordered the defendant to pay a fine of 20s., and 12s. 6d. costs.

GIN.

At the Worcester County Petty Session, on the 14th ult., William Hodges, landlord of the Yellow Lion Inn, Powick, was charged with selling adulterated gin on the 16th March. Mr. Bently appeared for the defendant and pleaded guilty. P.S. Heyes proved going to the inn and purchasing a pint of gin. He produced the certificate of Dr. Swete (county analyst), which showed that the gin contained only 62 per cent. of proof spirit, and that it was three degrees below the 35 degrees under proof allowed. The adulteration had been caused by added water. Mr. Bently addressed the Bench in mitigation of the penalty. A fine of 5s. and costs, 12s. 6d. in all, was imposed.

BEER.

Oscar Ludwig Knopff pleaded guilty to beer-dilution at the North London Police-court on 19th ult. When Mr. George Langley Cobb, the Revenue officer, took the samples, the defendant admitted adding two gallons of water to the cask of 36 gallons of beer, but said he only did so on Saturdays, when his trade was larger than usual. It was shown by the chemist from Somerset House that the original gravity of the beer was 1,055.57, while the "fined" sample was only 1,047—a dilution thus being shown of 14 per cent. Defendant said he had only recently resorted to the practice of dilution, and that was because of trouble. Mr. Lane imposed a fine of £8 with £2 costs.

CHEWING GUM.

At Liverpool Police Court, on the 19th ult., Nicholas Worsley, 184, London-road, was fined 10s. and 15s. costs for having sold chewing-gum which contained 20 per cent. of paraffin. Inspector Baker saw the gum in the window, and went into the shop and purchased some of it, which he had submitted to analysis. The defendant pleaded ignorance of the elements of the substance, and said he sold it as he bought it. The analyst remarked in his report that the paraffin was neither usual nor necessary, and that it had been found by experience to be injurious to the health of children.

SOMERSET HOUSE AND BUTTER.

At the Wigan Borough Police-court, on the 20th ult., James Oliver, provision dealer, Market Hall, was summoned for selling, to the prejudice of Inspector Sumner, half-a-pound of butter which was not of the quality demanded by the purchaser, being adulterated with 30 per cent. of fat, foreign to butter, on the 30th February. The Town Clerk (Mr. A. Smith) prosecuted, and the defendant was represented by Mr. J. Wilson.

The Town Clerk said the Bench would remember the case came before them some six weeks ago, but there was a discrepancy between the analysis which had been made by the borough analyst and one made by an analyst on behalf of the defendant. Mr. Orsman (the borough analyst) found 30 per cent. of added fat foreign to butter, and Messrs. Davies and Son, of Liverpool, who were analysts of repute, made an analysis for the defendant, and certified that the butter was free from foreign fat. Accordingly they requested the Bench to order that the third sample should be submitted to the authorities at Somerset House, and it was a matter of considerable satisfaction to the borough analyst, as it would be a serious thing for him so soon after his appointment if a certificate had been given by the Somerset House authorities inconsistent with the one given by him. The analysis from Somerset House confirmed the one made by Mr. Orsman, because he believed that the authorities at Somerset House allowed a margin of 10 per cent., and he gave the defendant the benefit of the doubt to that extent, and their certificate stated that the butter consisted of not less than 20 per cent. of foreign fats. The samples were taken in the Market Hall on the 12th February, and the defendant from the first expressed considerable confidence in the result of the analysis. He had been shown by Mr. Wilson a warranty that had been given to him by the person who sold the butter to him that it was pure. Mr. Wilson said he was afraid the certificate given from Somerset House was binding upon him, and that there was no appeal from it. He regretted that, because he was instructed by those who dealt with the butter that samples of exactly a similar article had been analysed by some of the ablest experts in the country, and it had on every occasion been passed as satisfactory. The defendant had placed every confidence in the certificate given by the analyst in Liverpool, and was of opinion that the butter was pure, and without any reflection upon anyone they were still of the same opinion, but they must bow to the certificate from Somerset House. He wanted the Bench to understand that it was a perfect case of an innocent man who had broken the law without intending to do so. The butter was bought by him as pure butter, and was sold to the inspector as butter, and no one was more surprised than Mr. Oliver and the people with whom he dealt when they saw the result of the analysis from Somerset House. Defendant had acted throughout as an honest man, and no want of care was attributed to him. Defendant was ordered to pay a fine of 20s. and costs, and the cost of the analysis at Somerset House.

[We would direct the attention of the Wigan Town Clerk to the article last week on Somerset House certificates. We do not see how it should have been a serious thing for Mr. Orsman were Somerset House to differ from him, as every expert analyst knows that Somerset House cannot analyse butter. We do not appear to have had a report of the previous hearing, so do not know if the certificate of the outside analysts referred to (Messrs. Davies and Son, of Liverpool) was allowed to be put in as evidence, without these gentlemen being called to substantiate it. If it were, it was illegal, and ought not to have been permitted.—ED.]

ANALYST'S REPORTS.

The Laboratory, 11, Billiter-square, E.C.,
London, March 13th, 1893.

TO THE CHAIRMAN AND MEMBERS OF THE DERBYSHIRE
COUNTY COUNCIL.

My Lords and Gentlemen,

I have the honour to report that during the first quarter of this year twelve samples have been submitted to me for analysis under the sale of Food and Drugs Act by your inspector, Captain H. S. Sandys.

These samples were:—butter, 9; milk, 2; syrup of red poppies, 1. Of the nine samples of butter, three were adulterated, two consisting entirely of margarine, and one containing 75 per cent. of margarine, with 25 per cent. of real butter.

The two samples of milk and the sample of syrup of poppies were quite genuine.

The adulteration of butter with margarine is becoming more serious year by year, and at the present time immense quantities of butter, "guaranteed genuine," are imported from abroad containing margarine in smaller or larger amount. Margarine, being made in close imitation of butter as regards colour, texture, and taste, can hardly be distinguished even by experts from butter, and mixtures with butter cannot, in most cases, be discriminated from butter except by chemical analysis. No doubt in many cases the retailer purchases these mixtures in the full belief that they are genuine butter. In others, the retailer knows from the price that the article cannot be genuine.

As almost the entire amount of margarine consumed in England is produced abroad, its sale as such, and especially under the name and at the price of real butter, is most prejudicial to English agriculture. Every means should therefore be adopted to stop the fraudulent sale of margarine, or margarine mixtures. The Food Act and the Margarine Act, if properly administered, would be quite capable of checking and preventing the fraud; but as I took occasion to point out on previous occasions, the Acts are mostly not worked with the vigour demanded by the circumstances.

I am glad to think that you, My Lords and Gentlemen, have now under consideration the question of applying the Food Act more stringently in Derbyshire. I firmly believe that, by working the Act energetically, adulteration could in a short time be stamped out, to the great benefit of your dairy-farmers and inhabitants. Your Weights and Measures Committee made certain recommendations to you at the last County Council meeting, which I felt it my duty to criticise as inadequate and more or less unfair to your analysts. As I unfortunately only became acquainted with these recommendations two days before the meeting of the County Council, I was compelled, reluctantly, to address letters to the individual members of the Council. I sincerely hope that your Weights and Measures Committee may succeed in elaborating a plan leading to efficient protection from adulteration in Derbyshire. I may here state that had it not been for the fact that your inspector, Captain Sandys, has for years past exercised the utmost care and circumspection in the selection of the samples to be submitted to analysis, the Act would have done much less good than has been actually effected.

The Sale of Food and Drugs Act, at the same time, stands in urgent need of amendment. In the course of the last seventeen years many defects have shown themselves in the Act. At present it touches only the retailer, who is frequently quite innocent of intentional fraud, and provisions are urgently needed with a view of reaching the wholesale dealers and importers. The Bill, to which I drew attention some time ago, brought in by Dr. Cameron, M.P., is again before the House of Commons, but it still has the defects from which it formerly suffered—namely, that while it seeks to make the wholesale dealer responsible, it virtually secures the repeal of the Food Acts, and if it became law would render successful prosecutions almost impossible.

The system of reference in disputed cases under the present Act to Somerset House is also eminently unsatisfactory. The experience of the Inland Revenue chemists as regards analysis of food is exceedingly circumscribed, and the reputation of the public analyst is at present almost at the mercy of referees singularly devoid of that authority which should be possessed by persons holding such important positions. Many cases of adulteration must be passed by the public analyst, because he knows from experience that the Inland Revenue chemists are not able to detect such adulteration, and would certify in contradiction of the public analyst. This applies especially to milk and butter adulteration.

I have the honour to remain,

My Lords and Gentlemen,

Your obedient servant,

OTTO HEHNER,

Public Analyst,

Past-President of the Society of Public Analysts.

THE "QUEER" LARD CASE AT DURHAM.

In reference to the prosecution for lard (*Laidlaw v. Willson*) which was recently heard at the Consett Petty Sessions, we understand that the authorities of the County of Durham have taken the necessary steps to ask the justices to state a case for the opinion of the Queen's Bench Division of the High Court of Justice. It will be remembered that the magistrates held that an ordinary contract note, together with the invoice, constituted a written warranty within the meaning of the Act.

CORRESPONDENCE.

To the EDITOR of FOOD AND SANITATION.

ADULTERATED LIQUORICE.

SIR,—In reference to Mr. Rogers's remarks *re* liquorice, I would point out that in a case tried at the North London Police-court recently, the magistrate drew a distinction between liquorice as a sweetmeat and as a drug. I trust you will allow me the opportunity of stating that the decision arrived at is grossly unfair to the chemist, the confectioner, the public, and in a degree (though that I do not dwell upon) to the importers of genuine liquorice. It is unfair to the confectioner, because it brands him henceforth as a dealer in impure articles, and places the fair dealer at a serious disadvantage with his unscrupulous rival who may be permitted to sophisticate liquorice to any degree with foreign matter, and still vend it as liquorice.

The issue was confused, because an attempt was made to induce the magistrate to believe that no genuine stick liquorice is imported, and it was gravely sought to put the pure brands of liquorice which come to this country from Calabria, on the same footing as the wretched substance imported from Spain, France, and elsewhere, and which, of course, requires the addition of other ingredients to render it palatable.

No chemist will of course be deceived by such attempts, and their apparent success in this instance as a means of defence, demonstrates the failure of the existing system of administration in cases of a purely commercial description. In saying this, I disclaim any intention to hold in disrespect the magistrate who tried the case. What I wish to point out is, that questions of this kind would be more satisfactorily dealt with by men possessing the confidence of the trade, and well versed in the production and properties of the articles under investigation.

As the possible consequences of the decision appear to have been overlooked, it may be pointed out that while importers of a pure brand are required to supply the pure product to the chemist, they are at liberty to adulterate it for the confectioner.

In the unfortunate event of such decisions becoming general, it will be the duty of importers of pure brands, with the assured support of the drug trade and the public, to seek the obvious remedy, namely, the amendment of the Food and Drugs Act, to prevent makers and dealers from vending adulterated liquorice as liquorice, and to compel them to denominate and describe the article as a mixture or compound. As the defenders in the actions referred to confidently assert that the public are aware the article is adulterated, no harm will be done by supplying it with a correct designation and description, while justice will be done to the importers and the chemist.

In conclusion, the worst cases of adulteration have not apparently been attacked, namely, the brands of French liquorice juice which are known to contain 70 per cent. of adulteration. One of the witnesses in the North London case expressed the opinion that no respectable wholesale houses now stock these brands, but I may state that they are still quoted in the price lists of one or two leading houses. There can be no doubt that the sale of these worthless compounds has very considerably effected the consumption of liquorice by the public, and greatly interfered with its use as a demulcent for coughs, colds, and other affections of the throat.

Yours faithfully,
EXPERT.

WEDNESDAY'S PRODUCE MARKETS.

SUGAR.—The refined market is firm, with more doing in pieces, and crystals at fully late rates. Stoved goods quiet, but firm. In foreign refined a fair business done, at firm prices. Grocery canned sugars unchanged: refining kinds firm. Tate's cubes, firsts, 23s; seconds, 22s; crushed, firsts, 21s 3d; Liverpool crystals, firsts, 22s 9d; small, 22s; seconds, 21s 6d; granulated, 20s 9d; Martineau's cubes, firsts, 23s; seconds, 21s 6d; titlers, 22s 6d; pulverised, 21s 6d; chips, 21s 6d; granulated, 21s 3d per cwt. Beet firm, and old crop active and dearer on American demand. Closing strong. Old crop 3d to 4½d higher on the day. A good business done. May, 17s 7½d plus ½ per cent., 17s 9d less ½ per cent., and 17s 9d; June, 17s 9d plus ½ per cent., 17s 10½d less ½ per cent., and 17s 10½d; July, 17s 11½d, 18s less ½ per cent., 18s and 18s plus ½ per cent.; August, 18s, 18s plus ½ per cent., 18s 1½d less ½ per cent., and 18s 1½d; September, 16s 6d plus ½ per cent., 16s 7½d less ½ per cent., 16s 7½d, closing with sellers at the latter; October sold 14s 3d; November-December, 13s 10d less ½ per cent., and 13s 10½d, closing with sellers at the latter.

TEA.—The auctions of Indian show firm rates for grades at 9d and under; other sorts unchanged.

COFFEE.—A firm market for good colory, and at the auctions Ceylon and East India sold fully up to previous value, as also the good grades of Central American. Common qualities have gone slackly and were partly bought in. Futures quiet, closing rather easier. New York opened 5 to 15 points down. Havre afternoon report May 87½; September, 88½; December, 88½; March, 88½; Hamburg, May, 74m; September, 73m; December, 72½m; March, 72m; Amsterdam, 50c.

SPICE.—At the auctions a quiet tone prevailed, 9,407 bags black pepper. 8 bags fine Mangalore sold 5½d, and 44 bags Lampong, at 2½d. Penang, 601 casks at 2½d. Of 180 bags white, 5 bags Penang

sold at 3½d, fine Singapore bought in at 9d, and Siam 4 9-16d. bags Pimento fourth sold, mostly 3½d, one lot 3d; bulk bought in at 3½d. 59 cases nutmegs, 20 cases sold; Penang 79's at 2s 3d, smaller 1s 5d to 1s 9d, 65's bought in 3s 3d. 304 Penang mace out at 1s 7d, and 15 cases Maoussar at 1s 10d. 115 packages West India spices sold; nutmegs, 66's at 2s 11d, 74's at 2s 3d, 86's at 2s 1d, smaller 1s 6d and 1s 7d; mace, good, 1s 10d to 1s 11d, ordinary 1s 6d to 1s 8d per lb. 50 bags Sierra Leone chillies sold at 40s. 29 barrels Madras capsicums out. 151 packages Cochinchina ginger bought in at 66s to 68s and 105s; 198 bags Japan at 35s; 501 packages Jamaica chiefly sold at 63s to 76s 6d; better grades 79s to 102s per cwt.

ARROWROOT quiet. 1,326 barrels St. Vincent nearly all bought in at 3½ to 4d, a few lots selling at 2½d to 3½d; 100 tins out at 5d. per lb.

TAPIOCA.—The bulk of 1,165 bags Eastern flake was bought in, a few lots Singapore selling at 1½ to 1 9-16d per lb. 641 bags sold; seed at 13s, medium 12s to 12s 6d, bullet 13s 6d per cwt. 220 bags flour withdrawn.

SAGO quiet. 684 bags small grain bought in at 11s 3d to 12s 6d. Of 400 bags Sarawak flour, fourth sold at 9s 6d per cwt.

RICE fair enquiry.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended April 29, 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities.	
		1892.	1893.
Animals living:—			
Oxen, bulls, cows and calves	.. Number	7,220	4,807
Sheep and lambs	.. ..	1,212	90
Swine	.. ..	—	—
Fresh meat:—			
Beef	.. .. Cwts.	34,304	47,630
Mutton	.. ..	38,460	30,728
Pork	.. ..	1,729	1,266
Salted or preserved meat:—			
Bacon	.. ..	71,876	39,425
Beef	.. ..	7,336	2,390
Hams	.. ..	17,605	17,276
Pork	.. ..	7,008	2,770
Meat unenumerated, salted and fresh	.. ..	4,483	4,157
Meat presv'd., otherwise than by saltg.	.. ..	19,453	9,958
Dairy produce and substitutes:—			
Butter	.. ..	41,476	44,642
Margarine	.. ..	24,608	22,046
Cheese	.. ..	19,509	13,192
Condensed milk	.. ..	6,603	10,959
Eggs	.. .. Grt. Hundr.	183,463	251,582
Poultry and game	.. .. Value £	2,347	3,369
Rabbits, dead (not tinned)	.. .. Cwts.	706	479
Lard	.. ..	31,364	13,356
Corn, grain, meal and flour:—			
Wheat	.. ..	861,492	936,162
Wheat meal and flour	.. ..	285,104	546,205
Barley	.. ..	185,919	209,352
Oats	.. ..	198,978	273,825
Peas	.. ..	34,065	24,874
Beans	.. ..	24,906	23,146
Maize or Indian corn	.. ..	435,535	926,704
Fruit, Raw:—			
Apples	.. .. Bush.	27,056	22,740
Oranges	.. ..	137,740	109,305
Lemons	.. ..	—	29,361
Cherries	.. ..	—	37
Plums	.. ..	5	10
Pears	.. ..	147	75
Grapes	.. ..	78	700
Unenumerated	.. ..	1,042	6,750
Hops	.. .. Cwts.	1,198	1,717
Vegetables:—			
Onions, raw	.. .. Bush.	152,021	156,690
Potatoes	.. .. Cwts.	20,617	65,519
Unenumerated	.. .. Value £	18,556	18,237

* Not separated in 1892.

Statistical Office, Custom House, } T. J. PITTAR.
London, May 1st, 1893.

NOTICE.

THE Editors beg to thank the many Public Analysts, Medical Officers of Health, Sanitary Inspectors, and Inspectors under the Food and Drugs' Acts, who have sent reports, notes of cases and written approving of the objects of FOOD AND SANITATION, and will be glad if Public Analysts and Medical Officers of Health generally will oblige by sending regularly their reports and such cases of importance as occur in their districts.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

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Calvert's No. 5 Carbolic,

which is of the quality adopted as "Standard" by the British and German Governments after bacteriological tests. Unscrupulous statements that other Disinfectants are superior to genuine Carbolic Acid should be treated with the distrust they deserve. Sold by most Chemists in 8 and 16 oz. bottles, at 1s. and 1s. 6d. each; $\frac{1}{4}$, $\frac{1}{2}$, and 1 gallon tins, 2s. 6d., 4s., and 6s. 6d. each; or larger lots at rates on application to

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60 MEDALS, &c.

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THE CRAB-APPLE BLOSSOM PERFUME, Reg.



2/6 and 4/6
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2/- and 4/-
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ANNUAL SALES EXCEED 500,000 BOTTLES.

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SOLD EVERYWHERE.

SPECIAL NOTICE TO OUR READERS.

Many of our subscribers having pointed out to us how useful a column for questions and answers would be, we have pleasure in informing our readers that we have arranged with eminent sanitary, analytical, and legal experts, who will be pleased to answer and advise gratis through this column, upon any questions of procedure or difficulties on which information is required.

We would be pleased if readers of this journal, in enquiring for samples of any of the preparations advertised in it, would mention the name of the journal in their enquiry.

LIVERPOOL AND MILK ADULTERATION.

THE LIVERPOOL INSPECTORS ARE DOING EXCELLENT WORK.

On the 3rd inst., Inspector Baker summoned Betty Platt, milk-dealer, 3, Dublin-street, for selling as pure new milk a milk that in one case was adulterated with six parts of water to every 100 parts of the poorest milk, and in another for having sold milk which was adulterated with nineteen parts of water to every 100 parts of the poorest milk. She had been twice previously fined for offences of this kind in different names, and was now fined £5 and costs, and £10 and costs. Phoebe Robinson, milk dealer, 66, Doncaster-street, was fined £3 and costs for having sold skimmed milk to which upwards of thirteen parts of water to every 100 parts of the poorest milk had been added.

Food and Sanitation.

SATURDAY, MAY 13, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE CO-OPERATIVE SWINDLE ON THE POOR.

A SHAMEFUL MISCARRIAGE OF JUSTICE AT SADDLEWORTH.

IN our issue of February 4, we commented on the case of the Burnley Co-operative Society—a case disgraceful enough—the Society being charged with selling butter containing 20 per cent. of water—i.e., seven to eight pounds of water per hundred pounds more than is naturally present in butter. The customers of this Society are the poor, hardworked, and ill-paid operatives of Burnley, who, out of every shilling expended in butter, were thus defrauded of $\frac{1}{4}$ d. to 1d. paid for water made to stand upright. It leaked out in evidence that the real defendants were the Wholesale Co-operative Society, Manchester, who sell annually £500,000 worth of this excess watered butter in the two counties of Lancashire and Yorkshire, and who, by this means, get an extra £40,000 per year for water sold as butter. To their shame the Burnley magistrates, one at least of whom, if we recollect aright, was connected with the Co-operative Society, dismissed the case. We have now to chronicle another case equally disgraceful to the magistrates who tried it, and the Society that practices such impositions on its members.

"At Saddleworth West Riding Police-court, on the 26th ult., before Mr. Buckley Dent, Mr. Henry Mallalieu, and other magistrates, the Manager of the Dobcross and Delph Co-operative Society was summoned by Mr. A. L. Bridge, inspector of weights and measures, &c., for selling butter which was not of the nature and substance demanded. Mr. Hiley, from the office of the West Riding Solicitors, Wakefield, was for the prosecution, and the manager of the store was defended by a solicitor from Oldham, at the instance of the Wholesale Co-operative Society, Manchester. The Court was crowded, a large proportion of the audience being composed of farmers, and the proceedings lasted over three hours. The evidence of Mr. Bridge, supported by the certificate of the county analyst, went to show that the butter, which was Irish, contained 21 per cent. of water.—The defence was that butter could not be made up without water.—Mr. Mallalieu strongly denounced the Act under which the proceedings were brought.—A gentleman from the Co-operative Wholesale Society's Office, Manchester, was one of the witnesses called for the defence. He said the butter was sound, and the Society had, since this year came in, imported considerably over one million pounds of butter. In cross-examination he declined to say one-fifth of the bulk, as in this case, consisted of water.—The magistrates, after consulting in the ante-room, returned into court, and the chairman announced that they had decided to dismiss the case, and it was dismissed accordingly."—*Huddersfield Examiner*, April 29th.

We invite the attention of the Lord Chancellor to the disgraceful spectacle of a magistrate entrusted with the enforcement of the law, denouncing, as Mr. Henry Mallalieu did in unmeasured terms, the Acts for the protection of the public which he is commissioned as a justice of the peace to administer. It will be a grave scandal if that strange specimen of a J.P. be allowed to any longer bring justice into contempt. That there may be no possibility of doubt as to the character of the fraud sanctioned by the Saddleworth Bench, we give the following figures as to the amount of water present in butter. English butter analysed by Dr. P. Vieth in 1890, fresh and salt, averaged 11.54 per cent. of water, the minimum being 7.85 per cent. and the maximum 14.39 per cent. Mr. Droop-Richmond found that the butters analysed by him for the Aylesbury Dairy Company in 1892 showed English salt butters an average of 13.99 per cent. of water; French fresh butters 13.98 per cent., and French salt butters 12.86 per cent. of water. The gentleman from the Wholesale Co-operative Society wisely declined to say that the million pounds of butter his society dealt in contained one-fifth of water, but if the facts be as alleged in the Burnley case, that £500,000 worth of this butter containing 20 to 21 per cent. of water is sold in Lancashire and Yorkshire, a statement which would appear to be warranted by the fact of 21 per cent. of water being found in this Saddleworth Society's butter, then we are

plainly confronted with a fraud upon the public of a colossal kind. Every expert public analyst knows that the water averages in thousands of samples of butter are fairly estimated in these figures of Dr. Vieth and Mr. H. Droop Richmond, and that any higher percentage of water than 12 per cent. is left in butter by carelessness or put there for fraud. Let us look at the effect of this fraud upon the public and upon makers and vendors of genuine natural butter. The makers of butter that contains the natural percentage of water can be undersold by eight to ten shillings per cwt.: the ordinary retailer who vends an honestly made article does so in competition with what is in Bolton and Saddleworth a fraudulent article, *magisterially protected*, and which swindles the purchaser of 3d. to 1d. per pound on every pound of butter purchased. The poor—and here the meanness of the fraud is revealed in its worst form—purchase this excess-watered butter, paying, as we have said, *full butter value for water made to stand upright*—which soaks into the paper or exudes into the butter-dish—a clear waste to the purchaser's detriment of about one ounce per pound. And this is the depth to which the teachings of Kingsley, Maurice, Neale, Hughes, Holyoake and like noble-minded pioneers of progress has been degraded. There are fearless outspoken journals in Lancashire and Yorkshire. Will not some of them take up this case of as mean a fraud upon the thrifty deserving poor as can well be imagined? Will none of them join in a demand that such magistrates as these at Saddleworth and Bolton, if they be not summarily removed from positions they abuse to the public injury, should at least receive such a reprimand that they will realise that any further like shameful exhibitions of justices' incompetence will relegate them to an obscurity from which they ought never to have emerged. There is a curious *à propos*-ness in this Saddleworth Dogberry's name. Roughly translated, *mal à lieu* means badly placed. On the Saddleworth bench Mr. Mallalien undoubtedly justifies his name.

HOW MILK ADULTERATION PAYS AND IS PUNISHED.

THE encouragement magistrates everywhere offer to fraud receives fresh proof in the following cases. We would draw the attention of dairy farmers, of the Central and Associated Chambers of Agriculture, and of the Local Government Board, to the utter inadequacy of fines of this character, and to their effect upon officials entrusted with the enforcement of Acts to protect the public from fraud. To the officials they are the worst of discouragements, to local authorities who are in earnest about putting the adulteration in operation, they are a scandalous injustice, inasmuch as the cost of enforcing the Acts is heavy, and if proper fines were inflicted, with adequate costs, in cases of proved adulteration, the Acts would not only be more vigorously administered, but would be self-supporting. We take a few typical cases at random. Mr. Shiel, at Westminster, apparently manufactures a law for himself, to the end that any person who chooses to put a boy as proprietor of a dairy, may, under that cover, vend adulterated milk with impunity. This only can be the meaning of the following case:—

At the Westminster Police-court on the 13th ult., George Ford, 55, Westmoreland-street, Pimlico, was summoned at the instance of the Vestry for selling milk adulterated with water to the extent of 14 per cent. Mr. Hitchin appeared for the prosecution. The summons was originally issued some weeks ago, but on the case being before the Court, Mr. Shiel said it was absurd on the part of the Vestry to say that the defendant, a lad of 14, was the proprietor of the dairy, and the case was adjourned to enable inquiries to be made. The same defendant now appeared, and Mr. Hitchin said that as the result of enquiries it had been ascertained that the defendant really sold his own milk and received the profits. Mr. Taylor, the Vestry's inspector, proved the purchase of the milk, and the result of the analysis, but Mr. Shiel said it was absurd to bring such a boy there as the defendant, and dismissed the summons.

At Huddersfield, Albert Sykes, 70, Swan-lane, Lockwood, was summoned for selling adulterated milk. The District Inspector visited defendant's shop on the 29th March, 1893, and was served to a pint of new milk for 14d. by the daughter. During the usual performance of division the mother appeared, who, on being informed of what had taken place, said, "Well, but we have no new milk." On analysis the milk contained 15 per cent. of added water. The defendant, who was out distributing milk from a cart, and had not returned home, was intercepted in Northgate on the same day, and the sample bought from him gave on analysis 6 per cent. of added water. The defendant was fined 10s. and expenses in each case.

It is very disheartening to find magistrates thus showing no appreciation of their responsibility to the public. In this Huddersfield case the vendor, by the sale of such milk, could in a few days recoup himself of fine and costs, and as that town contains some 96,000 inhabitants, and the present rate of taking samples for analysis appears to be about 27 per quarter, it is obvious that milk adulteration, punished only by ridiculous penalties of this kind, is a paying business.

At Bromsgrove Petty Sessions occurred another case of this stamp:—Richard Brewster was charged with selling a pint of milk which contained 8 per cent. of water. P.C. Howard stated that he bought the milk of defendant's man, and returned him one part, retained one, and sent the other to Dr. Swete, county analyst. Mr. Holyoake did not deny the facts of the case, but the weather at the time was hot, the vessel into which the milk was taken from the cows and those to which it was transferred for sale were washed and probably not quite dry, and it was well-known that at this time of the year, for want of grass, the milk was not so rich as at other seasons. These combined causes would account for the small percentage of water found in the milk. He hoped the Bench would consider the payment of the costs by defendant would meet the case. Dr. Swete was in attendance, and Mr. Smallwood said the cases were adjourned from last week because the analysis then sent was not sufficiently ample. Dr. Swete said he was not allowed by the Act to state more on the certificate than he had done, and went on to explain the difference between the Somerset House analysis and that of the county. There was a similar charge against Joseph Parkes, Catshill, for whom Mr. S. Roberts appeared. The defendants were ordered to pay the ordinary costs in each case.

This case presumably came before a county bench, probably composed mainly of landowners. We would like these gentlemen to ask themselves in all seriousness if by such acts as these they do justice to the public or to English dairy farming. As a matter of fact they "burke" the work of Analyst and Inspector. The following looks sensible compared with the above:—

Hannah Harris, of 29, Stanhope-street, Euston-road, was fined 20s., with 12s. 6d. costs, for selling milk adulterated with 12 per cent. of added water.

Again magistrates are misled by Somerset House, as in the following case:—

At the Edgware Petty Sessions on the 14th ult., John and William Giles, farmers and milk dealers, of Horsehills Farm, Harlington, near Dunstable, appeared to an adjourned summons for selling milk to the purchasers, Messrs. Street and Raymond, with 4 per cent. of added water, on the 25th February. Mr. A. M. M. Forbes prosecuted for the Middlesex County Council; and Mr. Ricketts defended. Mr. W. Tomlin, inspector under the Food and Drugs Act, took a sample of the milk at Child's-hill railway station on the morning of the 25th of February, which was duly certified by the county analyst to be adulterated with 4 per cent. of added water. On the application of Mr. Ricketts, the sample of milk was submitted to the Analytical Department at Somerset House, and the result now read was that in their opinion the result of the analysis did not afford evidence that water had been added to the milk. Mr. Ricketts applied for costs. His clients had come all the way from Bedfordshire at great cost, and had both sworn that no water was added to the milk, in fact were so satisfied that they challenged the certificate of the county analyst. He hoped the Bench would allow full costs. Mr. Forbes said it was rather unfortunate that none of the justices who heard the case were now present. The County Council were acting in the strict exercise of their duty in taking these proceedings, and although there was a dispute between the county analyst and the analyst at Somerset House, he thought they should not be called upon to pay more than nominal costs. Mr. Ricketts asked for more than nominal costs. They ought to have legal costs. Mr. Gilbert said it was all very well to say there was a dispute between the county and Somerset House analysts, but it was very much like a conflict between that Court and the Lord Chief Justice. Mr. Forbes thought the Somerset House authorities were not held in that light. The County Council analyst was *prima facie* the authority in this case. Mr. Ricketts said his clients had been compelled to travel to the Court, and travelling cost money. The Bench dismissed the case, allowing costs amounting to £6 16s. 10d.

In the following case it will be noted that there were previous convictions. This being so, the penalty of £10, although a great advance in the direction of public protection, cannot be regarded as at all adequate, seeing that by the Act magistrates have power to inflict a penalty of £20.

At the West London Police-court, on the 18th ult., Charles Wheeler, of 56, Boscombe-road, Shepherd's-bush, appeared to answer to an adjourned summons, issued on the complaint of Mr. J. H. Clarke, sanitary inspector to the Chiswick Local Board, the officer charged with the execution of the Sale of Food and Drugs Acts, for selling milk at Chiswick from which 10 per cent. of fat had been abstracted. Mr. R. F. Finnis, clerk and solicitor to the Board, appeared to support the case, and Mr. Edward Bevan, analyst to the Middlesex County Council, also attended. At the first hearing the defendant disputed the analyst's certificate, and elected to have the milk analysed at Somerset House. Mr. Finnis in opening the case said that he wished to point out that Mr. Bevan had taken a high standard in analysing the sample in question, and that in all probability his worship would find that the Somerset House certificate would show a much larger percentage of fat abstraction. Mr. Haden Corser said that was so, in fact, the Somerset House certificate showed that 20 per cent. of fat was abstracted. Inspector Clarke having proved previous convictions, the defendant was fined £10 and 12s. 6d. costs.

Scandalous as these cases are, they are capped by one heard at Ardwick on the 26th ult.

William Henry Brindley, provision and milk dealer, 290, Viaduct-street, Ardwick, was summoned by Inspector Wheeldon, who purchased a pint of milk from the shop on the 6th April. On the following morning he took a sample from the man who supplied Mr. Wilkinson. Mr. Estcourt's analysis showed that the milk bought from Wilkinson, as compared with that purchased from the dealer, had been deprived of 50 per cent. of its fat.—Alderman Lloyd: How much?—Mr. Estcourt: One half.—Alderman Lloyd: Only 50 per cent!—Defendant Wilkinson appeared, and said that on the night of the 4th April they were supplied with a quart of milk at five o'clock. It was never touched, and stood all night. About eight o'clock the next morning his wife sold two halfpennyworth of milk, and must have served it without stirring it up, and thus they must have got the cream. He nor she had ever tampered with the milk.—The Bench said it was just possible it might be as he had said—they did not say it was—but people ought to have their milk genuine, and defendant must pay a fine of 2s. 6d. and costs.

Here the public analyst apparently had to give evidence, and 50 per cent. of the fat was proved to be abstracted, yet the punishment is a fine of 2s. 6d. Such a travesty of justice requires no comment. It is eloquence itself as to the unfitness of the magistrates to sit upon any bench but that of a pot-house.

It may be useful to contrast the action of the Huddersfield and Bromsgrove magistrates in dealing with fraud practiced upon the public with similar offences done upon milk-vendors by farmers. As an instance:—

On the 14th ult., Mr. J. D. Ellson, a farmer, of Yelvertoft, near Rugby, was summoned at Marylebone by Inspector Fulton, of the St. Pancras Vestry, for sending milk to London adulterated with 45 per cent. of water. Mr. Ricketts, solicitor, who prosecuted, said the defendant was under a contract to supply Messrs. Harris and Price, dairymen, of Camden-road, with pure milk, at 1s. 7d. the barn gallon. A sample of the milk was recently analysed, and was found to be adulterated with 36 per cent. of water. The parochial authorities were communicated with, and on the 17th March Inspector Fulton took a sample of the defendant's milk on its arrival at Euston Station. The analyst's certificate of that milk showed that it was adulterated with 45 per cent. of water. The defence was that pure milk was sent to the firm. Mr. Plowden considered it a serious case, and fined the defendant £10, with 23s. costs.

The milk dealer who is well able to protect himself secures 10s. penalties, the public who are protected only by the Local authority or the Food and Drugs Act inspector, is safeguarded by 10s. penalties or by costs only. These facts show for themselves how necessary it is that the Local Government Board should take occasion to circularise every magistrate and point out the injury done to the public by such encouragement to fraud as our columns have, during the past ten months made public.

MR. LABOUCHERE & MR. HERBERT GARDNER'S SALARY.

MR. LABOUCHERE has given notice that he will move the reduction of the salary of the Minister of Agriculture. We must in all sincerity say that Mr. Labouchere's resolve is a very laudable one. Mr. Gardner receives £2,000 per year from his country as President of the Board of Agriculture, and since he took the post, he has not done one noteworthy act of benefit to English, Irish, or Scotch agriculture. He has shown about as much initiative as an Egyptian mummy; and viewed in the most charitable light, the waste of £2,000 per year upon so utterly useless a minister is a public scandal. It is the curse of England that political *petit maitres* fill responsible positions for which they do not possess one real qualification. To appreciate fully its evil effects, contrast the action in agricultural matters of Denmark, France, or Sweden, with that of our wretched political wire-pullers, and the causes of the ruin of English agricultural industries are made plain. In England Chaplins, Gardners concerned with horse-racing or feeble play writing, draw forty pounds weekly for doing heaven only knows what. No steps such as those adopted by foreign countries to develop home industries, are undertaken by these "*miserables*" of politicians. Farmers are robbed of millions yearly by milk adulteration; by foreign butter "*mixtures*" sold as genuine butter; by "*Lipton*" American produce sold as English or Irish, but what does our Minister of Agriculture know or care about such questions? Nothing, nor does he appear to care to learn. Dairy-farmers, pig-curers, barley-growers, and others, who have been or are being ruined by margarine, false produce branding, or substitutes in beer swindles, will rejoice to learn that Mr. Herbert Gardner, M.P., President of the Board of Agriculture exerted himself so far as to write a comedy, "*Time will Tell*," which was produced at a *matinée* at the Trafalgar-square Theatre on May 8th. As a comedy, it was too dismally tragic for words to express. This, to our disgrace be it said, is the class of minister paid to direct the agricultural industries of the greatest country in the world!! The spectacle is a sad and a humiliating one. We therefore wish Mr. Labouchere every success with his motion.

ANOTHER QUEER LARD CASE.

DR. CAMPBELL BROWN, MR. B. KITTO, AND SOMERSET HOUSE.

At St. Austell Petty Sessions on May 2nd, the adjourned charge against Emma Sturtridge, grocer, of Leverean, St. Austell, for selling impure lard, was heard. Defendant was summoned at the instance of Superintendent Newcombe, of the Cornwall County Constabulary, who had received from Mr. Kitto, the county analyst, certificates to the effect that the samples of the lard sold by defendant were adulterated with 20 per cent. of cotton seed oil.—At the first hearing of the case Mr. Bellringer (Messrs. Bellringer and Cunliffe, of Liverpool), who appeared on behalf of the defendant, and also for Messrs. Fowler Brothers (Limited), of Liverpool, the refiners of the lard, submitted a certificate from Dr. Campbell Brown, the Lancashire County Analyst, in which he stated that a sample of the same lard as that analysed by Mr. Kitto was absolutely pure as guaranteed on the label affixed to the bucket containing it. Mr. Bellringer quoted cases to show that analyses by various analysts had been demonstrated to be unreliable, and that Dr. Campbell Brown had been adjudged to be right. He accordingly asked that the case might either be dismissed or adjourned, in order that Dr. Campbell Brown might be put in communication with Mr. Kitto, and if the explanations were not satisfactory the lard should be sent to Somerset House. Mr. Kitto, however, refused to vary his certificate, and the third sample and the lard was accordingly sent to Somerset House for analysis. The certificate of the Somerset House analysts produced at St. Austell on May 2nd, and signed by Messrs. J. Bell, R. Banister, and G. Lewin, of the Somerset House Laboratory, certified that "the lard affords no evidence of cotton seed oil."—Mr. Bellringer said that the publicity given to allegations against Mrs. Sturtridge, and Mr. Rogers, of St. Austell, who sold the lard to her had already done them injury, and such statements as had been made might much more seriously injure the refiners, Messrs. Fowler Brothers, of Liverpool. The fact that the Somerset House authorities had declared the lard absolutely pure was, to some extent, satisfactory, but to make such charges was a very serious matter. He did not wish to reflect upon Mr. Kitto, but the least he could say was that if it was a mistake it was a gross and culpable one, because he said one-fifth part of what was sold as lard was not lard at all, and how such a certificate could have been given was to him (Mr. Bellringer), and as he also thought, to the Bench, inexplicable.—The case would be dismissed with costs.

This is another of the frequently occurring unsatisfactory cases occasioned by the fact that neither inspectors, County Council solicitors, or magistrates understand the Act. The inspector, prosecuting solicitor, or magistrates ought to have objected to Dr. Campbell Brown's certificate *being admitted as evidence*, unless Dr. Brown was in court to substantiate it. There was no actual proof adduced that the samples analysed by Dr. Campbell Brown and Mr. Kitto were identical. Mr. Kitto is the public analyst and *his* certificate was the only one that the magistrates were entitled to accept as evidence. As to Somerset House alleging that the lard contained no cotton seed oil, it is to be regretted that the magistrates allowed their certificate to be used as evidence without demanding their appearance in court. We have no faith in their lard analysis for all-sufficient reasons. It might even have been that this case was analogous to one well known to public analysts—where Somerset House certified that a lard contained *no cotton-seed oil*, and the vendors not only got off scot free, but the public analyst's certificate was discredited—wherein Somerset House suppressed the fact, which they well knew, that the lard was adulterated with sesame oil! It is a great pity that the analysts themselves were not called to support their certificates, as illegal procedure, such as this at St. Austell is bad alike for the manufacturer and the public, and is grossly unfair to the public analyst concerned.

THE MERTHYR JUSTICES DECIDE THAT BEER MAY BE ANYTHING.

The following is the finding of the Merthyr justices upon the point submitted to them by the Superior Court in the list case of Thorney v. Shoot, which was one of many prosecutions instituted by the Glamorganshire County Council for selling beer alleged to be adulterated: That the salt used in this case in the manufacture of the beer was not injurious to health; that it was added to the beer for the preparation thereof as an article of commerce and not fraudulently to increase the bulk, weight, or measure of the beer or to conceal the injurious quality thereof; that under the proviso of Section 6 of the Sale of Food and Drugs Act, 1875, any ingredient not injurious to health can be used if it does not particularly increase the bulk, weight or measure of the food or conceal the inferior quality thereof; and that it is not for the justices to ascertain and determine whether or not the quantity of such ingredient so used is excessive or not, and for this reason we find that the beer was of the nature, substance, and quality demanded by the purchaser.

Happily, however, the farmers' journals have now taken up the question, and this sanctioning of fraudulent beer may be, we hope, soon altered by a pure beer bill.

PUBLIC HEALTH NOTES.

At the meeting last week of the Managing Committee of the Dover Town Council, acting as the Urban Sanitary Authority, Councillor Ayers described a sanitary state of affairs which, for so important a port and health resort, is not creditable. Councillor Ayers said they had heard a good deal of the insanitary state of New-street, and about the water-closets, and one thing and the other. On the previous day he had been up New-street with the Surveyor, and found that the water-closets in the houses were without water and in a deplorable condition, and that there was in one place only one tap for nine houses. There was also a great deal of filth in the areas. He thought it was time that state of things should be remedied. In the private courts the pavements were in a most disgraceful state. The Surveyor said he went with Mr. Ayers, and agreed with him in his description of the state of the houses. Notice had been served upon the owners to put the houses in repair, but had been allowed to stand over, pending the decision of the Street Improvements scheme. The Medical Officer remarked that he had condemned the property years ago, and the Surveyor said he had made a report on it himself. The most original idea that the Committee could suggest in face of this damning evidence of their own supineness, was to direct the Surveyor to bring up the reports at the next meeting.

The action of the same Committee on the Cholera question was no more intelligent. They had before them the report of an officer of the Local Government Board who had visited the port, and had suggested the most necessary precautions that should be taken. Alderman Peake and Councillor Brown appear to have scoffed at these recommendations, and at the "host of expensive and apparently unnecessary things" contained therein. Consequently, the only part of the Local Government Board Officer's report that the Council decided to carry out, was to provide a book to be kept on the mail steamers, in which the name of any passenger suspected of conveying cholera could be entered. And yet this is the principal port of entry for the continental traffic to the United Kingdom!

The danger of infection from rags imported from abroad has been fully appreciated, and provided for by the port sanitary authorities of London, but in New York there has not been the same care observed to exclude suspicious cargoes of the kind. The *Herald* recently declared that a large portion of the cargo of a steamer, which had just arrived from Europe, consisted of rags gathered from German hospitals and reeking with pus and blood. Dr. Jenkins, the health officer of the city, declared that any cholera germs there might be in these rags were destroyed by treatment with disinfectants, but, as the *Herald* points out, where the health of a nation may be at stake, would it not be better to keep out such cargoes altogether?

To define the extent to which the vendor of a house is liable for defects in the drainage is often a moot point with judges and juries, but there is a distinct improvement in the view now commonly taken in cases of actions for damages. A case in point occurred at Clerkenwell County Court the other day. The purchaser of a house at Whitehall Park, Upper Holloway, sued the vendor for £50 damages on account of defective drains discovered after the purchase. The plaintiff's child fell ill of typhoid fever, and this, in view of the fact that the vendor had declared the drains had "every modern improvement." It was proved that although the drains were passed by the Islington Vestry in 1891, they showed defective joints last year. The jury held the claim proved, and gave a verdict for the full amount with costs.

The 1576 deaths registered in London last week included 11 from small-pox, 26 from measles, 21 from scarlet fever, 54 from diphtheria, 43 from whooping-cough, 13 from enteric fever, 21 from diarrhoea and dysentery, one from "cholera," and not one from typhus or any ill-defined form of continued fever; thus, 190 deaths were referred to these diseases, being 31 below the corrected average weekly number. Eleven deaths from small-pox were registered, the corrected average being 6. The numbers of cases of this disease under treatment on Saturday last in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital were 502 and 29 respectively, making a total of 531, against 428, 450, and 474 on the preceding three Saturdays; 161 cases were admitted during the week, against 86 and 110 in the preceding two weeks.

The Metropolitan Asylum and London Fever Hospitals contained 2,161 scarlet fever patients at the end of last week, against 2,026, 2,037, and 2,103 on the preceding three Saturdays; 280 cases were admitted during the week, against 267 and 259 in the preceding two weeks. The deaths from diphtheria, which had been 44, 47, and 50 in the preceding three weeks, further rose last week to 54, the corrected average being 20. Of the 54 fatal cases, 8 belonged to Poplar sanitary area. The Metropolitan Asylum Hospitals contained 318 diphtheria patients at the end of last week, against 280, 301, and 302 on the preceding three Saturdays; 71 cases were admitted during the week, against 73

and 60 in the preceding two weeks. The deaths from whooping-cough, which had been 49, 60, and 49 in the preceding three weeks, further fell last week to 43, and were 31 below the corrected average. The deaths from diarrhoea, which had been 15, 14, and 8 in the preceding three weeks, rose last week to 21, exceeding the corrected average by 4. The fatal cases of enteric fever, which had been 8, 7, and 8 in the preceding three weeks, rose last week to 13, exceeding the corrected average by 4. The Metropolitan Asylum Hospitals contained 47 cases of enteric fever and one of typhus on Saturday last; 7 cases of enteric fever were admitted during the week, against 9 and 10 in the preceding two weeks.

At the Exeter Museum on Saturday, Professor A. Wynter Blyth, M.R.C.S., barrister-at-law (medical officer of health for Marylebone,) delivered a lecture on "Sanitary Law—General enactments; Public Health Act, 1875; Model Bye-laws, etc."

A recent outbreak of epidemic disease at Llandovery, has been put down to defective sanitation. Local ignorance termed it "black fever," but it proves to be an infectious type of pneumonia, which is capable of rapid spread if the sanitary arrangements are not such as to permit of the rapid disposal of the feces. There have been similar outbreaks recorded within recent years in different parts of the country, especially in some Yorkshire towns. At Middlesbrough in 1818, the epidemic was a particularly severe one.

At the annual meeting of the Darlaston Local Board on the 2nd inst., the medical officer (Dr. Partridge) reported a death-rate of 24.6 per thousand. Measles had been prevalent in the Fallings Heath district, causing three deaths, and he had found it necessary to give instructions for the closing of schools for a fortnight. Mr. Winn said typhoid fever was prevalent in the town, and he did not wonder at it, for abominable nuisances existed through burning mounds and other causes. Mr. Simpson said the night-soil contractor was greatly in arrears with his work, and had tendered his resignation, which had been accepted. Mr. Yardley said that if the sanitary condition of the town was not improved, he feared there would be an alarming outbreak of contagious disease.

On Saturday last at the Technical School, Lower Kevin-street, Dublin, an interesting and instructive lecture on Articles of Food was delivered by Mr. Francis Vacher, F.R.C.S., F.C.S., Medical Officer of Health of the Cheshire County Council. The lecture was intended for the instruction of sanitary inspectors, of whom a large number were present. The lecturer treated *inter alia* of the articles of food which medical officers of health and food inspectors are empowered to examine and seize. He gave a quantity of information in reference to the best methods of detecting unsoundness and adulteration.

Prof. Leeds, the eminent American bacteriologist, has contributed some amazing figures on the subject of the infection imparted to milk from unclean cowhouses. They are as convincing as they are alarming. He says that "while fresh milk taken from a healthy cow in a clean stable contains almost no bacteria, the number present in milk taken from cows in filthy stables surpasses belief. One sample contained over five million colonies of bacteria in a cubic centimeter (about one-third of a teaspoonful). Another contained fourteen million colonies. A teaspoonful of this milk would contain fifty million colonies of bacteria."

THE MERCHANDISE MARKS ACT IMPOSTURE.

Those who believe that because the Merchandise Marks Act is on the statute book fraudulent marking is being checked, are invited to read the following:—

In the House of Commons, on the 2nd inst., Colonel Howard Vincent asked how many prosecutions had been undertaken by the Board of Trade for offences against the Merchandise Marks Act.

Mr. Mundella: There have been nine prosecutions, four of which resulted in a conviction, three were dismissed, and two withdrawn, and others are under consideration. No inspectors are employed and none were ever contemplated under the Act.

Mr. Mundella omitted to say that out of this miserable total of nine attempts to prevent foreign fraud, one conviction upheld in the Court of Queen's Bench, Dublin, against Mr. T. J. Lipton, for marking and vending American produce as Irish produce was quashed by the Lord Lieutenant of Ireland remitting the fine, nor did Mr. Mundella take any trouble to point out that an Act that cannot be enforced without an immense loss of time and money, and for which no inspectors to deal with it are in existence is a silly farce. But Mr. Mundella receives some £2,000 per year apparently for helping to preserve such farces as the Merchandise Marks Act and his own claims to statesmanship. We wonder how much longer Mr. Mundella will let the railway companies plunder agriculturists, grocers, and traders everywhere, by the increased railway rates, and if he will make good his brave words of months ago, or were they only blustering imposture? What M.P. is there who will bring in a compulsory Merchandise Marks Act, having provisions for the appointment of inspectors and the prevention of fraud by foreigners?

BUTTER ADULTERATION IN DUBLIN.

SIR CHARLES CAMERON'S ANALYSIS ATTACKED.

SOMERSET HOUSE APPEALED TO.

AN IRISH COUNSEL'S INSOLENT.

On the 27th ult., at Dublin, in the Southern Police-court, before Mr. Swift, Peter Murphy, of 60, South Great George's-street, was summoned at the instance of James Cooke, food inspector, for having sold to complainant one pound weight of butter, which was not of the nature, substance, and quality of the article demanded by the complainant. Mr. M'Inerney (instructed by Mr. M'Sheehy, law agent to the Corporation) prosecuted, and Mr. O'Shaughnessy, with whom was Mr. E. A. Ennis (instructed by Mr. John Ennis) defended.

James Cooke, Corporation Food Inspector, deposed that on the 11th March he visited defendant's shop, 60, South George's-street. He saw exposed for sale on a shelf several parcels of apparently butter to none of which was a margarine label attached. He asked the assistant for a pound of 10d. butter, which he supplied. Witness paid for the butter, stated who he was, and for what purpose the butter was required. Witness offered to divide the butter into three parts and deliver one to him. He accepted the offer, and witness gave one of the parts to Mr. Murphy and another to the City Analyst on the same day. The parcel he gave to Mr. Murphy he sealed in an envelope in the same way as he delivered the sample to Sir Charles Cameron. Witness got the certificate (produced) from Sir Charles.

Sir Charles Cameron was cross-examined by Mr. O'Shaughnessy, Q.C., as to the character of the analysis made by him.—He had been City analyst for 31 years, and had two or three assistants to help him. He could not say what day he got the sample in question, but he did not analyse it until three or four days after he got it. Mr. O'Shaughnessy:—What day did you get it?—I cannot tell; I stated I got it on the day certified, on the 6th April, and analysed three or four days afterwards. Mr. O'Shaughnessy: You sometimes sign those certificates without seeing the samples?—No. Mr. O'Shaughnessy: Oh, take care now. Witness: Let us confine ourselves to one case. Mr. O'Shaughnessy: I will confine myself to what I like. Did you sometimes sign those certificates where the assistants performed the office of analyst?—I decline to answer that. Mr. O'Shaughnessy: Do you or do you not?—I decline to answer. Mr. O'Shaughnessy: On the ground that you would incriminate yourself?—I will answer any question the court asks with regard to the present case. Mr. O'Shaughnessy: I want to test you. Witness: You will find it very difficult to do that. Mr. O'Shaughnessy: Very probably I may. Did you ever sign certificates under this Act where the analysis was carried out by your assistants?—Well I may. Mr. O'Shaughnessy: Do you know that 11 milk cases were dismissed when that was found out?—In that case I explained at the very beginning that owing to an accident.—Mr. O'Shaughnessy: Oh, an accident! Sir Charles (continuing): I say that when I attend in this court I make the analyses personally, and in this case I made the whole analysis myself. Mr. O'Shaughnessy: Did you get assistance?—When I make an analysis I will swear I made it. I am responsible altogether for it. Mr. O'Shaughnessy: Of course, Sir Charles Cameron could not go wrong, but every other chemist may. Witness: I am not infallible. I admit that mistakes may be made by chemists. Mr. O'Shaughnessy: And mistakes may be made between butter and margarine?—Undoubtedly. Mr. O'Shaughnessy: And if butter came from a country house in Armagh you would not expect to find margarine in it.—I never expect anything but a fee. (Laughter.) Mr. O'Shaughnessy: But you would not expect to find margarine in butter coming from Armagh?—Upon my word from what I have heard I would expect it. Mr. O'Shaughnessy: Oh, they give it to the cows first?—They give it to the churn, and I believe they are doing it pretty largely. Mr. O'Shaughnessy: Give me an instance.—I will; the character of butter in Dublin has undergone — Mr. O'Shaughnessy: Never mind the character; give me an instance of the particular thing, where you know of your own knowledge that margarine is put into the churn in a country house. Can you do that or can you not?—You do not expect me to go and visit the places. The character of Dublin butter has completely changed during recent years, and Dublin at the present moment is full of margarine. Butter is put up for sale that is only a mixture of margarine and butter. I am satisfied of that from the total change in the butter coming into Dublin. Formerly the article was either undoubtedly butter, or undoubtedly margarine, but now out of 200 samples coming into Dublin fifteen were mixtures. Mr. O'Shaughnessy: You say this mixing is a very difficult thing to detect?—Yes, I was going to explain on what grounds I rely. Sir Charles (continuing) said he did not come to court because he heard his analysis was disputed. He came entirely in the interest of the public. He had not got notes of the first and second analysis he had made. He had made them in the last leaves of an old note-book, which had since become disused, and he would have to go to his residence for it—Pembroke-road. He was perfectly prepared to swear, however, to the results of the analysis he made of the butter.

Mr. O'Shaughnessy said he was prepared to produce Professor Tichborne to contradict Sir Charles, and would insist upon having the notes. Professor Tichborne would swear the sample was not margarine but pure butter.

The court adjourned for half an hour to permit Sir Charles to get his notes.

On its re-assembling Sir Charles produced his notes, and the case was resumed. The notes proved that the sample showed a specific gravity of 909.15. Sir Charles then explained the process of his analysis. He repeated his analysis two or three days after his first analysis. That would be about the 21st of March. The older the butter the more difficult it would be to analyse. A week or so would not make any difference. The water in butter evaporated in making an analysis; a chemist ought to have regard to that fact. In his analysis he determined nothing but the foreign fat. Would it be true that the moisture of this butter was 10.36?—It might be true. And that the curd was 1.76, and the salt 1.4?—I have no doubt. And that the butter fat was 86.48?—I do not know. Would it be true that the butter fat gave in 100 degrees Fahrenheit a specific gravity of 911.3?—Well I don't know. It is very unfortunate because we have taken great pains in this case I suppose these results were taken. Assuming they were taken by Professor Tichborne, would it not show that this was butter?—It would not. If I had got the results of Professor Tichborne's analysis I would not have advised the prosecution. Between 911.3, which is the specific gravity found by Professor Tichborne, and 909.15 found by you, there are only two points of difference. Your certificate is that 20 per cent., which is one-fifth of the whole bulk, is margarine. How can you explain that on the difference between 909 and 911—only two in the thousand?—If this case is decided against us I won't advise prosecutions in any more of these cases. I want to explain that we are only anxious to have this case investigated, to come to the conclusion as to the class of butter.

Dr. Leeper, Fellow of the College of Physicians, was called for the prosecution, and stated that he was of opinion that portion of the same sample which he had analysed was not pure butter.

Professor Tichborne was then called for the defence, and deposed that a sample of the butter was submitted to him for analysis, and he made a report on it on the 9th April. The witness then explained his method of analysis, and said he found the specific gravity to be 911.3. One reason why he and Sir Charles differed was because the latter always went on averages, while it was well known that there was a range in the specific gravity of butter, milk, and such things. Sir Charles said that the specific gravity of pure butter was 912, but but that was only the average, and it was found that it ranged from 910 to 914. No one could pronounce a thing adulterated on an average. Mr. Swift: There is common sense in that. To Mr. Ennis: In his opinion the sample was pure butter. It was within the limits of pure butter. Mr. Ennis: In your opinion does it contain any margarine?—It does not. Sir Charles Cameron: If I had got Professor Tichborne's results I would not have said there was any margarine in it. The witness was cross-examined by Mr. M'Inerney, and denied that he was only called in such cases to contradict and to prove that Sir Charles Cameron was wrong.

Mr. Murphy, the defendant, was next called, and in reply to Mr. O'Shaughnessy stated that the butter referred to had been bought from Mr. Leonard, who got it from the county of Armagh. He bought it as butter, and paid for it at the rate of 9½d per lb. He believed it was butter and sent a sample to Professor Tichborne after he received the summons. He had been once convicted under the Margarine Act. One of the boxes was produced and bore a stamp "Pure Irish Butter."

Mr. Swift: It is difficult for me to decide because I have two different opinions before me.

Mr. O'Shaughnessy: The *onus probandi* is on the other side, and they must satisfy you that an offence has been committed.

Mr. Swift asked had not Mr. O'Shaughnessy thrown out a desire to have a sample sent to Somerset House. He thought it was eminently a case where two eminent Irish authorities differed that a third opinion should be obtained.

Mr. O'Shaughnessy: If you are not satisfied with the evidence of Professor Tichborne I would ask you to send a sample to Somerset House.

It was then decided by the magistrate to send a sample to Somerset House.

WEST BROMWICH MILK APPEAL.

At the Quarter Sessions for the Borough of West Bromwich, which were held on the 18th ult. at the Law Courts, before Mr. R. E. C. Plumptre (recorder), Thomas Holt, wholesale milk-dealer, of Birmingham, appealed against a conviction by the borough magistrates for selling adulterated milk. Mr. R. E. C. Kettle appeared for the respondents, and Mr. W. J. Disturnal was for the appellant. It appeared that the appellant was a purchaser of milk from Lilleshall Dairy Company, in Shropshire, and the milk was consigned by him to different customers—retail tradesmen—in the Black Country. On March 1 a can of milk was consigned by the Lilleshall Company to James Holt, at the West Bromwich Railway Station, where William Grasson, in the employ of Inspector Morris, took a sample from the can, which, upon being analysed, was found to be adulterated with 8 per cent. of added water. Mr. Disturnal contended that there was no proof that the milk was sent or sold by his client to a Mr. Greenway, who took possession of the milk at the railway station. The evidence went to show that the Lilleshall Company were the sellers and the consignors, and that Holt was their agent. If there was any offence it was merely a technical one. He quoted from various sections of the Act of Parliament in support of his contentions. The Recorder reserved his decision, and said he would give judgment on the 30th June.

ADULTERATION PROSECUTIONS.

MILK.

At Glasgow Sheriff Summary Court, on the 2nd inst., James Brown, Partick, was fined £2, including expenses, for having sold to David Willock, sanitary inspector, of Partick, one pennyworth of sweet milk which contained 5 per cent. of added water, and was deficient in its natural fat or cream to the extent of 23 per cent.

At Ramsgate police court, Amelia Palmer was charged with selling adulterated milk. Defendant said she was guilty of selling it, but not of adulterating it. Mr. W. D. Millard, inspector of Food and Drugs Act, produced his authority to act in these proceedings, and deposed that on 11th ult. he purchased from the defendant, at 32, Addington-street, a pint of milk, for which he paid 2d. He informed defendant of his intention to have it submitted to the public analyst, and having described the division of the milk into three samples, produced the certificate of the Borough Analyst stating that the milk was adulterated with 8 per cent. of added water. Defendant said she sold the milk as she got it. Defendant was fined £1 and 10s. costs, and was advised by the chairman to obtain certificates that the milk was genuine from the farmer who supplied her.

Walter Nicholls was charged with a similar offence, and pleaded not guilty. Mr. W. D. Millard, said he purchased from a boy in defendant's employ while in King-street a pint of milk for 2d. The analyst's certificate showed that the sample was "impoverished by the extraction of 18 per cent. of the fat or cream." Defendant said he found it necessary to buy milk sometimes, the demand varying. The milk was some of that which he had bought. It was impossible for him to tell whether the milk was pure or not. It took the analyst two days to say whether it was pure or not. He (defendant) bought the milk of a gentleman whom he thought to be of the highest character, and who had sat on that Bench. The magistrates thereupon retired, and on returning the justices said they considered the case far more serious than the previous one, and he would be fined £5 and costs. Defendant asked if there was any appeal. The chairman advised him to consult a solicitor as to what course he had better take, pointing out that the decision was given on a question of fact. We hear that notice of appeal has been duly given.

At Roborough Petty Sessions on the 1st inst., Andrew Sandover, Laira, was charged with selling milk adulterated with water. Mr. W. H. Bickle appeared for defendant, who pleaded "not guilty." Superintendent Roberts prosecuted:—George Greenwood, a boy, said that on April 15th, by Superintendent Robert's orders he went to Sandover's shop to buy a pennyworth of milk. Superintendent Roberts spoke to sending the last witness into Sandover's shop and to taking the jug with the milk from him. He took the jug back to the shop, where he saw Mrs. Sandover. He said, "I bought this milk for the purpose of having it analysed by the county analyst, and I now offer to divide it into three equal parts. One part I will send to the county analyst, one part I will keep myself and one part I leave with you. Do you wish me to divide it?" She said, "Yes," and he divided it into three equal parts, labelled and sealed. Dr. Winter Blyth, the county analyst, had forwarded him a certificate to the effect that the milk had been deprived of five per cent. of milk fat by skimming or otherwise, and was adulterated with at least six per cent. of water. He further added that the milk, at the time of analysis, had undergone no decomposition.—By Mr. Bickle: Witness said nothing whatever about having come to analyse the milk himself. Mrs. Sandover offered no objection when he proposed analysis.—P.O. Greenwood corroborated.—Mrs. Sandover, in defence, said she always bought the milk from Mr. Bere, of Chaddlewood Farm, as they kept no cows of their own. Witness had no written warranty for selling the milk. She would swear that Superintendent Roberts said nothing about the county or the public analyst. Witness herself asked him if he was going to have it analysed by the borough or the county analyst, and then the superintendent told her.—Mr. Sandover said that he kept the bottle of milk, which Superintendent Roberts left at the shop, on the shelf until a warrant was served upon him. He then asked Dr. Dutton to analyse it.—Mr. Bickle remarked that he did not think Dr. Dutton's certificate on it could be taken as evidence, as the milk was in a state of decomposition when taken to the doctor. Witness went on to say that the milk sold to the first witness was a portion of that supplied by Mr. Bere. They had only had one previous complaint. Mr. Bickle, in defence, said that his client ought to be acquitted on two grounds, first, that the Act of 1875 laid down that the agent who bought the milk in such cases as this should be an authorised officer known to the analyst. Greenwood was not such a person. Again, there was only Superintendent Robert's word for it that he (the superintendent) had spoken the regular formula as laid down by the Act. On the other hand Mrs. Sandover swore that nothing about the public or the county analyst was mentioned until she asked. The amount of milk fat—5 per cent.—which had been removed was very little. The ordinary amount permitted was 2·5 per cent. And, he ventured to think, the quantity of water alleged to have been mixed with the milk was very little in comparison with certain like cases which had recently been brought to notice. On these grounds he asked that the case should be dismissed. The magistrates said they were of opinion that the case was made out, and fined defendant £1 and costs, advising him to obtain a written warranty from Mr. Bere for the sale of milk without delay.

On Friday, the 5th inst., at the Leeds City Police-court, before the stipendiary magistrate, (Mr. Bruce), George Flesher Whitaker, farmer and dairyman at Knostrop, Leeds, was charged with selling milk which, upon analysis, was found to be adulterated.—It appeared

that William Benn, a servant of the defendant, was delivering milk to a milk-dealer in Holm-street, in the city, when Inspector Walker asked him for a pint of new milk, for which he paid the man. On analysis the sample was found to be adulterated with at least 17 per cent. of added water. The defendant was fined £5, including costs. Mr. C. C. Jolliffe (Deputy Town Clerk) prosecuted, and Mr. H. A. Child defended.

BUTTER.

At Wellingborough, on March 30th, Swann Bros., grocers, Rushden, were charged with a breach of the Food and Drugs Act by selling adulterated butter, at Wollaston, on February 27th; also with exposing margarine for sale without having a label properly attached, at Rushden, on the same date. Mr. W. J. Henry appeared in support of the prosecution, and said on the charge of selling butter he should show that there was not a particle of butter. He pointed out that it was a serious case, and should be dealt with severely. The butter, which was sold as fresh butter, consisted of 90 per cent. of foreign fat, and 10 per cent. of curd and water. Defendants pleaded guilty, but said that their manager had made a mistake in selling margarine for fresh butter. In this case defendants were fined £7 and 9s. costs. In the other case defendants also pleaded guilty, and were fined £3 and 9s. costs, the fines and costs in both cases amounting to £10 18s.

At the Salisbury Petty Sessions, William Duckles, manager of the Ebbesborne Wake Co-operative Society Stores, was again charged, on the information of Mr. Beardsley, Inspector of Weights and Measures, with having sold an article of food, viz., butter, on the 10th March, which was not of the nature and substance of the article demanded, and contrary to the 6th section of the Food and Drugs Act, 1875. Mr. Nodder appeared for the defendant, and Mr. Powning appeared on behalf of the prosecution. Defendant pleaded guilty. Mr. Nodder, in addressing the Bench, stated that his client bought the butter as good butter, and sold it as such, and he produced the invoice sent from the firm from which it was bought in Ireland. The cost of the butter was 96s. per cwt. His client had had the butter analysed, and found that it was adulterated, and it was on that ground that he pleaded guilty. They had communicated with the Irish firm, who said that they sold the butter to defendant with the understanding that it was good. Neither the defendant nor the Irish firm sold the butter with intent to defraud the public. Mr. Powning stated that the article sold by defendant was analysed by the public analyst, and found to contain 30 per cent. of foreign fat. He did not deny that the defendant sold the butter with the understanding that it was good, but he had not got a certificate to show what the butter was as required by law. The Chairman said they (the Bench) thought the public should be protected against the sale of adulterated butter. The defendant would be fined 1s. and costs, in all £2 0s. 6d.

LARD.

At Leeds on April 27, Walter Edwards, grocer, Town-street, Farsley, and St. Peter's-street, Leeds, was summoned for selling to Mr. W. B. Walker, on the 4th of March, a pound of lard that contained 54 per cent. of foreign fat. On the morning after the inspector had purchased "lard," the grocer called at his house and explained that it was not lard, but "lardine" that he had sold him. A fine of 50s. was inflicted.

WHISKY.

At Hailsham on the 26th ult., Edward Hope, Bull Inn, Wartling, was summoned for selling adulterated whiskey to Mr. Geo. Durnford, inspector of weights and measures for the Battle district, 29·3 degrees under proof spirit, being adulterated with water 4·3 under the standard. Defendant was convicted and fined £1 and costs.—William Honeysett, innkeeper, of Herstmonceux, was summoned for selling adulterated brandy. Defendant pleaded not guilty. Mr. Durnford said he purchased half a pint of brandy, for which he paid 2s. He forwarded a portion of it to the public analyst and produced his certificate, which stated that the alcoholic value of the brandy was 29 degrees under proof spirit, and was adulterated with water four degrees under the standard. A fine of £1 and costs was also imposed in this case.

RUM.

On Wednesday, 12th April, at the South-Western Police-court, before Mr. Hayden Corser, William Bush, of the White Swan, Nine Elms-lane, was summoned by the Vestry of the Parish of St. Mary, Battersea, for selling to Inspector Sullivan, on the 27th February, rum, 39·1 degrees under proof. Fined 40s. and 12s. 6d. costs. At the same time and place, Alfred Page, of the Nine Elms Tavern, Nine Elms-lane, Battersea, for selling rum 28·5 degrees under proof. Fined £1 and 12s. 6d. costs.

VINEGAR.

MORE SHAM VINEGAR.

At Smethwick police court, Ellen Merrick, trading as W. H. Merrick, of Rolfe-street, Smethwick, was charged at the instance of Mr. J. E. Morris, inspector under the Food and Drugs Act, with selling vinegar not of the quality demanded by the purchaser. Mr. R. A. Willcock prosecuted, and Mr. B. Shakespeare defended. Mr. Willcock explained that, on the 16th March, an assistant in the employ of Mr. Morris visited the defendant's shop and asked for a pint of malt vinegar. The sample supplied to him, on being analysed, was found not to be vinegar at all, but simply water coloured with pyroligneous acid. He asked the Bench to inflict such a penalty as would stop the reckless sale of this stuff. The manager of the shop said they made the vinegar themselves, but he could not say exactly what the ingredients were. This being the first case in the district, the Bench fined the defendant £2 8s. 6d., including costs.

FOOD PROSECUTIONS.

POISONOUS FOREIGN PORK.

On the 20th ult., at the Westminster Hospital, Mr. John Troutbeck, the Westminster Coroner, concluded an inquest into the circumstances attending the death of Edward James Elliott, a milkman, lately residing at 25, Carlton-street, Battersea, who died after eating pork on Tuesday, March 14th. The inquiry had been adjourned in order to have an analysis of the contents of the stomach made by Dr. Stephenson, public analyst. At the former hearing the widow deposed that on the previous Saturday night her husband brought home some pork for which he had paid 6d. per lb. The meat was baked on the Sunday with some sage and onions, brocoli, and potatoes, of which meal the deceased, his wife, and their child, aged three, partook at dinner and supper. They noticed nothing unusual about the pork, but the following morning Mrs. Elliott and the child became ill, but recovered after a violent attack of diarrhoea. The deceased, however, became so ill that he was taken to the hospital, where he died on the Tuesday. Frederick James Hinton, meat salesman at the Central Meat Market, stated that he sold the pork to Mr. Cramp, butcher, of King's-road, Chelsea, on the 10th March. The carcasses came from Ostend, and only reached London on that day. They then appeared to be perfectly sound and good. Witness sold the meat to Mr. Cramp at 4s. 1d. per stone, or a little over 6d. per pound, which was a very good market price for that day. The pigs would have been killed about eighteen or twenty hours before witness had them. They were not frozen. Dr. Thomas Stephenson, M.D., and analyst to the Home Office, read a statement in which he said that by bacteriological cultivations three kinds of micro-organisms were grown from the pork. Of two animals fed on this pork one suffered from temporary illness. Two animals were injected with fluids obtained from the pork, and both died. He was of opinion that the pork contained a chemical poison, a product of the action of the bacteria on micro-organisms. In summing up the evidence, the Coroner said it was evident that when the pork was sold there was nothing to show its poisonous condition. Dr. Stephenson's examination showed that the pork would produce death, although to an outsider, or even a butcher, it seemed wholesome and fit for food. In answer to the jury, Dr. Stephenson said that the death was evidently caused by chemical poisons produced by the excreta of bacteria. The jury returned a verdict of accidental death.

MUTTON.

Before Baillies Kemp and McKenzie, in the Aberdeen Police-court on the 20th ult., Robert Mathieson, fletcher, Shiprow, appeared in answer to a charge of being the person to whom four carcasses of mutton belonged which had been seized on 1st ult. in premises in Hadden-street, Woodside, as unfit for human food. The following day the mutton had been ordered to be destroyed. Accused pleaded not guilty, and was defended by Mr. J. M. Ferguson, advocate. After hearing evidence, a fine of £5, with 29s. 6d. of expenses, was imposed, the alternative being fourteen days' imprisonment. Accused, on leaving the dock, asked in a rather excited tone, if he could get any redress. The sheep had been bought at a public auction mart as good, healthy sheep, and it was rather hard to be treated in the way he had been. Baillie McKenzie: You can consult Mr. Ferguson about that. Accused: It's a scandal and a shame, and more will yet be heard about it.

At Dudley, on the 21st ult., Ernest Smith, West Bromich, and Edward Tredwell, Dudley, butchers, were summoned for having on their stall in the Market-place, on the 28th February, two quarters of beef and six pieces of meat which were unfit for human food. Only Smith appeared to answer the summons, and stated that he pleaded guilty with regard to one shoulder. Mr. Warmington (Town Clerk), who prosecuted on behalf of the Town Council, stated that Tredwell had not been seen since the institution of the prosecution, and there was every reason to believe he had gone to America. The whole of the meat seized was absolutely unfit for food, but the prosecution considered that Tredwell was far more to blame than Smith. Since Tredwell disappeared, Smith had taken the stall, and had kept perfectly wholesome meat. The Bench believed that Smith had been in the hands of Tredwell, and only imposed a fine of 20s. and costs. The case against Tredwell was adjourned *sine die*.

TINNED MEAT.

At Blackpool, on the 17th ult., George Harrison, grocer, of Wildman-street, Queen's-Park, Blackpool, was summoned for exposing fish for sale that was unfit for food. Mr. W. J. Read prosecuted on behalf of the medical officer of health, and Mr. Garnett, of Burnley, defended. It appeared that on March 7, Francis Macdonald, the nuisance inspector, visited defendant's shop, and saw thirty-two tins of salmon offered for sale. Noticing that some of the tins were blown, Macdonald inquired the price, and Mrs. Harrison told him 6d. He had two of the tins opened, and the contents were found to be bad. Then he seized the remainder, and fifteen of them were pronounced bad by Mr. Handley, J.P., and ordered to be destroyed. By Mr. Garnett: Witness said the ends of the tins were blown out. The salmon was not dry, but had gone black and smelt badly. He had not had any complaints about the salmon. Defendant told him that had he thought the salmon was bad, he would never have had it in his shop. Dr. Anderson, medical officer of health, gave evidence to prove that the fish was unfit for human food. Mr. Garnett, in defence, contended that the defendant had not exposed the fish for sale, as the tins were on a shelf eight feet or nine feet

high. Then, again, he contended that the word "exposed" meant that the fish itself must be seen; instead of that it was in a hermetically sealed tin. He argued that like eggs it did not come within the meaning of the Act of Parliament which dealt with the question. This salmon was of a cheap kind—sold at 7d.,—and came from a large consignment from a Liverpool firm, who had received no complaints except this one. Evidence was called to show that purchasers of the salmon had had no cause to complain, and that the fish was sound. The Bench imposed a fine of £5 and costs, with a guinea for the advocate's fee, and they reminded defendant that he had rendered himself liable to a penalty of nearly £100.

WHOLESALE POISONING BY BRAWN.

VERDICT OF MANSLAUGHTER.

At an inquest held on the 8th inst., at Burryport, the jury returned a verdict that the two deaths were due to ptomaine poisoning from eating brawn supplied by Mr. Alfred Deards, butcher, of Burryport. The jury added that they were of opinion that reasonable precaution was not used by Deards in his selection of meat employed and its preparation. A verdict of manslaughter was therefore returned.

PUBLIC HEALTH PROSECUTIONS.

At the Paisley Police-court on the 21st ult., the case of Isabella McCallum or Barr, dressmaker, Victoria-place, came up for disposal. Accused was charged with having on 7th March delivered a dress which she had made, and which had been exposed to scarlet fever, then prevailing in her house, without having disinfected it. She pleaded not guilty, and it was stated on her behalf by the doctor who had been in attendance at the house that disinfectants had been used. After hearing agents, the magistrate stated that he had given the case careful consideration, and found the charge not proven.

At Bootle, on the 22nd ult., Elizabeth Niblock, living at 2, Surrey-street, Bootle, was summoned at the instance of the Health Committee for unlawfully exposing, without previous disinfection, certain clothing, which had been exposed to an infectious disease—to wit, smallpox. William Daley, sanitary inspector, said that between the 4th and 19th inst. several persons living in defendant's house had been removed to the hospital suffering from smallpox. After the removal of a patient the house was disinfected, but the defendant, instead of waiting the requisite three weeks, after which time the premises would be free from all infection, pawned several articles of bedding, and, in company with her children, visited her neighbours, who were also allowed to enter the defendant's house. Notwithstanding repeated warnings from the inspector, she continued to pawn things, and took no precaution whatever to prevent the spread of the disease. Mr. Maunders, who appeared on behalf of the defendant, admitted the offence, stating that she had four children in the hospital and seven at home to keep, her husband being in the hospital. On receiving notice to have her children vaccinated, she pawned several articles in order to provide her children with clothes, thinking she would get into trouble if they were not sent to the public vaccinator. Mr. Daley said he did not ask for a heavy penalty, but wanted it to be distinctly understood that this dangerous practice must be stopped at once, asserting that an epidemic might break out at any time in the borough. The magistrates, however, dismissed the summons, remarking that they hoped it would be a lesson to her, and at the same time a warning to other people.

At Devonport Police-court on the 21st ult., James Robb was summoned, at the instance of Mr. J. May, medical officer of health, for carrying on an offensive trade without the consent of the Urban Sanitary Authority. The Town Clerk (Mr. J. J. E. Venning) prosecuted, and Mr. Percy T. Pearce defended. Mr. Venning explained that defendant, at his factory, in Bullock-dock, Richmond-walk, carried on the process of cleaning and scraping the entrails of animals. After the offal had been cleaned and washed off, the skins were used in the manufacture of sausages. The smells from the factory were very offensive, and complaints from time to time, since 1878, had been made to the Sanitary Authority. Mr. J. May, medical officer of health, said he visited defendant's factory on April 1st, and again on the 19th. The stench was very offensive in the factory itself, and occasional whiffs blew over to the slopes above. Defendant used plenty of water and disinfectants in his trade. By Mr. Pearce: Defendant had done everything that witness had suggested to him in order to abate the offensive character of the process. Thomas Geaton, sanitary inspector, gave evidence as to the smells from the factory. On March 14th it was unusually bad. Mr. Pearce, after pointing out that defendant had done all in his power to abate the nuisance, contended that the business in which he was engaged was established before August, 1875, when the Public Health Act, under which the summons was taken out, came into force. As a matter of fact, defendant's business was established in March, 1875. The Bench, after consultation, decided that they had no jurisdiction, as it appeared to them the business was established before the passing of the Act of 1875. The summons would, therefore, be dismissed, but not on its merits. Mr. Pearce asked for costs, on the ground that his client was likely to be brought there again. The Bench refused the application.

ANALYST'S REPORT.

LINCOLNSHIRE—KESTEVEN.

Mr. Cassal's report says:—

"During the quarter ended on the 31st December last, twenty samples of food, consisting of seven samples of whisky, seven of gin, three of milk, and one each of brandy, rum, and coffee, were submitted to me for analysis by the superintendents of police for the Bourne and Sleaford Divisions.

"The nature of the samples submitted, and the general procedure in taking samples, is not in any way within the control of the public analyst, in the administrative county of the parts of Kesteven."

Of the seven samples of whisky three were adulterated, one being 35·2 under proof, the others being 26·86, and 25·7 under proof respectively; the limit fixed by the Sale of Food and Drugs Amendment Act for 1879 for whisky being 25 under proof.

For gin the limit is 35 under proof, and the samples showed 50·7; 40·1; 39·47; 36·0; 35·46 under proof respectively. Only three samples of milk were taken, and two were adulterated, having 16 and 15 per cent. added water. As previously noted the chief constable still gives no record of fines, but six persons appear to have been summoned.

Mr. Cassal says respecting a tincture of rhubarb case:—

"With reference to the case of adulterated tincture of rhubarb, I understand that the summons was dismissed on the ground that it had not been served [within 'a reasonable time'; it being implied that there had been too much delay on the public analyst's part in making the analysis and issuing the certificate. I have to point out that what is, and what is not, 'a reasonable time,' in matters of this kind, can only be decided upon by experts, and that the Bench do not appear to have had any expert evidence before them upon the point. As a matter of fact the case was one in which unusual precautions and very much trouble were necessary to avoid doing injustice to the vendor of the sample, and the time taken was perfectly reasonable under the circumstances. Had an opportunity been afforded for doing so, this statement could have been made to the Bench by myself, and, if necessary, its accuracy could have been borne out by the evidence of any scientific witnesses who were duly qualified and worthy of attention, and of

THE APPLICATION OF THE ACTS.

"It will be observed that during the past quarter half the number of samples submitted for analysis were certified as adulterated, and in connection with the fact I beg to refer to my remarks upon this subject in previous reports, and more particularly to those made in the report for the previous quarter (ended on 30th September, 1892) under the same heading. While I am well aware that there are especial difficulties to be met in applying the Acts in country districts, and, although rather more samples have been taken recently, I adhere to my previously expressed opinion that the number of samples taken for analysis in the Kesteven Division is insufficient."

Of twenty samples taken, it will be observed, that no less than sixteen were of spirits. Of butter, lard, vinegar, and other articles notoriously, as our columns show, grossly adulterated to the injury of English agriculture, not one sample was taken, and Kesteven like scores of other places, whilst pretending to administer the Acts, not only fosters knavery but resists every effort to spur it to do its duty. It is not to be wondered at that English agriculture should be depressed, when those who ought to encourage it, by their carelessness and idleness, assist in every way our foreign competitors to overrun our markets with stearined lard, butter mixtures, spurious vinegar, and the host of frauds that flourish even under the very noses of these Kesteven County Councillors. It is to be sincerely regretted that powers designed for the public protection are entrusted to hands so unworthy and so unpatriotic.

THE COUNTY OF MIDDLESEX ANALYST AND MILK STANDARDS.

At Highgate on the 1st inst., George Mee, of Caxton-road and Noel-park, Wood-green, trading as the Pure Milk Company, appeared in answer to an adjourned summons, charged with selling milk as pure from which 12 per cent. of cream had been abstracted. Mr. Edward Bevan, the county analyst, was called by desire of the Bench. In the interests of the public he declined to state openly in court what was considered the lowest standard of pure milk. As to the sample in question, assuming it to be naturally very poor milk, then the result of his analysis showed that 12 per cent. of cream had been abstracted from it. If he took it as ordinary milk, then he would say that 38 per cent. of cream had been abstracted. Defendant said that every Saturday night one churn of milk was sent to Hornsey railway station direct from a farmer with whom he had dealt for over twenty-two years. It was divided for two men to carry, and probably the man who had the first lot had the missing cream with him, it being at the top. Mr. Tomlin said he had taken several samples of the milk sold by defendant, and always found it right before. The Bench fined defendant £5 and 17s. costs, including a fee for the analyst's attendance.

STRANGE ADULTERATION PENALTY AT CASTLEBAR.

From a report in the *Connaught Telegraph*, of April 29th, we learn that Thomas Hughes, milk contractor to the workhouse, was fined £40 for milk adulteration. The case as reported, is that:—

On the 1st inst., Sergeant Sloane went to the workhouse, and meeting with defendant's son, he demanded a sample. He then took three samples and gave one to the boy, sent one to Dr. Cameron and kept one himself. He received a return from Dr. Cameron stating that the milk was adulterated with 10 per cent. of added water. The sergeant also read the following letter from Dr. Cameron with reference to the analysis of the milk—"In reply to an inquiry by Sergeant Sloane, Castlebar, I have to state I have adopted the standard of 8·5 per cent. of solid minus fats in certifying that milk is adulterated. I must also explain that in my form of certificate the amount of water is added to the pure milk and not the amount of added present in it. For example, if a gallon of water were added to a gallon of milk, I call that adulterating the milk with 100 per cent. or its own weight of water; but most other chemists would say that the milk contained 50 per cent. of water. The fact is the same, but it may be differently stated, for the milk which is reported on as double the percentage of added water would not be 10. As 10 per cent. of water was added to the milk the 100 parts of milk would become 110 parts of a mixture of milk and water.

CHARLES CAMERON.

Sergeant Sloane said he inquired as he had heard that Professor Tichborne's certificate differed. A certificate by Dr. Tichborne stating that the milk contained 5 per cent. of water was produced for the defence. Mr. Horne maintained that both analyses meant the same. A fine of £40 was imposed.

Under Section 9 of the Act of 1875 the penalty is not to exceed £20. We cannot therefore understand how the Bench came to inflict a penalty of £40, unless there were two offences, or the case be inaccurately reported.

HELPING ENGLISH TRADE.

BEDFORDSHIRE AND ADULTERATION ACTS.

THE Bedfordshire County Council have approved of the following resolution drawn up by the General Purposes Committee:—

"Your committee has been impressed with the desirability of the provisions of the Sale of Food and Drugs Acts being more generally and effectively put into force throughout the county. Your committee thought it desirable to appoint a special sub-committee to take this question into their consideration, and, acting on their report, your committee beg to offer the following observations for the consideration of the Council:—The present system of obtaining samples for analysis through the police is confessedly ineffective, and the committee think that, in the interests of the population of the county, some better means of enforcing the law should be devised. Owing to the fact that the provisions of the statute can only be executed by certain public officials named in the Act, or by a police constable, and to the further fact that, with the exception of the inspector of weights and measures, no such public officials exist in this country, your committee are of opinion that the duty of carrying out the Act should remain with the police. The committee with this object in view, suggest that it should be recommended by the Council to the Standing Joint Committee (who alone have control over the police) that an inspector should be detailed for this special duty, who should act under well-considered rules for his guidance in employing persons unknown in the district to take samples. Great care should, in the opinion of your committee, be taken that in procuring samples, either from a shop or in any open place, the seller should have the full benefit of all safeguards which are contemplated by the statute."

MARGARINE ACT PROSECUTION.

At Gloucester Police Court on the 10th inst., Joseph William Edwards, butlerman, of Northgate-street, was charged under the Margarine Act, 1887, with exposing certain margarine for sale, on the 15th April, without the necessary margarine label.—Mr. G. Sheffield Blakeway appeared for the Authority, and Mr. A. Champney for the defendant.—Mr. Champney asked that Mr. G. Wright, the defendant's managing man, might be substituted in the charge, since Mr. Edwards did not reside at the shop, and his manager was entirely responsible.—Mr. Wright consented to the change in the charge, remarking that it was his agreement.—Mr. Blakeway said he was anxious to press upon employers their responsibility in seeing that their assistants conformed to the provisions of the Margarine Act, and it was for Mr. Champney to prove the exemption of Mr. Edwards' (the employer's) responsibility.—John Campbell, Medical Officer of Health, gave evidence as to the procuring of a sample of the margarine from defendant's shop on the evening of the 15th ult. The parcel of margarine bore no label, but a card was attached that ran something like, "Often imitated but never excelled." (Laughter). The article was being sold at 7d. per lb. Upon an analysis witness found the compound to consist of 97 per cent. of fat. (Laughter).—Joseph Henry Edwards, general manager for his uncle, Joseph William Edwards, examined by Mr. Champney, said on the firm engaging an assistant he was given instructions to label all margarine, and further to enter into an agreement to hold himself responsible if he omitted to do so.—After hearing the case the Chairman said the Bench were unanimously of opinion that Joseph William Edwards, the defendant, had not used due diligence in the matter, and they held him responsible.—There was a previous conviction against defendant.—The Bench inflicted a penalty of £20 and costs.

REVIEW.

"Public Health Laboratory Work." By Henry R. Kenwood, M.B. and Rubert Boyce, M.B. (London, H. K. Lewis, 136, Gower-st., W.C.).

This work is specially written for medical men seeking Public Health degrees, and attempts to teach not only matters strictly relating to Public Health, such as water supply and ventilation, but also gas-testing and analysis of the more important articles of food. In fact, the superficial reader might take the work to contain instruction for the Public Analyst and Sanitary Inspector, as well as for the Medical officer of health, from the fact that it includes a copy of the Sale of Food and Drugs Act, 1875, the Amendment Act, 1879, and of the Margarine Act.

We took up the work in the hope of finding in it something of interest to our readers, and in this hope we are not disappointed, for the part contributed by Dr. Boyce "On the methods employed in Bacteriological Research"—unfortunately occupying but the smaller portion of the book—is a concise, clearly-written and thoroughly trustworthy contribution to this important subject. Anyone desiring to take up practical work on Bacteriology, would do well to read Dr. Boyce's treatise. But by far the larger portion of the book treats of chemical subjects, the contribution of Dr. Kenwood. We much regret to be unable to find terms of appreciation for this part of the book. We say this, because chemical information should, before all things, be absolutely accurate in all details, and should be written with cookery-book-like clearness and conciseness.

But Dr. Kenwood is verbose; he gives directions evidently taken undigested from works of previous writers, and not unfrequently in contradiction to each other, and, what is far worse, he makes many statements which would not be tolerated even from a student of chemistry in an elementary class, some of which show an egregious want of knowledge of the subject Dr. Kenwood is teaching, under Professor Corfield, in University College. Our paper not being written for analysts, we refrain from quoting errors which would be patent to every qualified chemist, and confine ourselves to drawing attention to mis-statements which even the non-chemist can appreciate.

Agriculturists will be surprised to hear, on the authority of Dr. Kenwood, that nitrites of sodium and potassium are now extensively used for artificial manuring. Being, as we are, concerned with the preservation of what remains of English agriculture, lest any of our agricultural readers should use these salts as manure, we would like to inform them that the price of the article is at least £56 per ton, and that wherever nitrites are put as a manure, nothing will ever grow again. So much for Dr. Kenwood's facts! Rubbishy chemists as they are, Somerset House referees will no doubt rejoice that they have found an enthusiastic pupil in Dr. Kenwood, for he advocates 2.5 per cent. of fat in milk as a *very fair* limit of the fat in a pure sample, and thinks that the limit of the percentage amount of fat in milk which must be insisted upon, whenever the question of a legal limit is settled, must of necessity be a very low one in order to include those very poor samples naturally, which contain even less than 2 per cent.; and, in consequence, Dr. Kenwood cannot foresee any measure which shall preclude unprincipled dairymen from diluting rich milk down to this percentage. Of course, while teachers like Dr. Kenwood talk such drivel, and disseminate it among their pupils, unprincipled dairymen will sit at their feet, instead of pole-axing the animals that give milk with less than even 2 per cent of fat. But to show how worthless this teaching is, we need only say that even Dr. Bell has thrown over the particular Somerset House cow which yielded only 1.9 per cent. of fat when he wrote his unscientific book. Probably that cow is now dead, and one that gives milk with 2.75 per cent. is its successor. Being thankful for small mercies, we hope so? and we further hope that when Dr. Bell drops also his method of fat-determination—about which Dr. Kenwood states that it gives finer estimations than by processes of milk-analysis which are now adopted all the world over by competent men—we shall also hear nothing more about the present Somerset House fat limit, whatever that may be, but which is certainly not the one adopted rather too late by Dr. Kenwood.

We are astounded to learn that chalk is frequently added to milk to cover the otherwise evident addition of water. The reports of the Local Government Board, based upon the returns of public analysts, do not make mention of chalk in milk. Thirty years ago, when authors who wanted to be sensational talked about sheeps-brains in milk, they also were very fond of chalk, but surely Dr. Kenwood need not have attempted by claptrap to infuse new life into the old exploded fossil. To do the author full justice, he also states three pages further on, that chalk is now *rarely* added. The instances quoted are typical of the slipshod work found throughout the book. It is difficult to believe that the author has even read the proofs of the work, for in at least five places elsewhere he confuses alum with alumina, and moreover he calls salicylic acid a salt; but on the other hand he, by a rule of thumb method, tries to equalize matters, and terms a fat (beef fat) an acid.

As to butter, we find it stated, to our sorrow for Dr. Kenwood's pupils, that adulteration of butter with water is of such trivial consequence, that there is no necessity to make any effort, as a routine practice, to detect it. Miserable as Dr. Kenwood's teaching is on these questions, his book even touts for the chemical department at Somerset House. In his synopsis of the Sale of Food and Drugs Act, Dr. Kenwood actually gives directions, without in any way showing that the directions are *his own and not part of the Act, for the transmission of articles to Somerset House for analysis, the way they ought to be packed for that purpose, how they should be addressed, and the reasons for desiring an analysis, together with the nature of any suspected adulteration (if known)*. Having gone so far, the author might have used this good opportunity of giving information as to the fees charged at Somerset House (less 66 per cent discount)

for which "sweating" work Government utensils, laboratory and servants' time are availed of for private purposes.

We trust that we have said enough to warn our readers against this book, inaccurate in its science, and misleading as to its general information. We write also in the interest of the author, lest any wrathful reader thirsting for information, closing the book more in anger than in sorrow, might proceed to interview Dr. Kenwood at University College, Gower-street, W.C., and the sad scenes, which are recorded by Mark Twain when editing an agricultural journal, be repeated in Mr. Kenwood's case. Decidedly, with him also "the pumpkin as a shade tree is a failure."

WEDNESDAY'S PRODUCE MARKETS.

SUGAR.—Refined in moderate demand; pieces and crystals sold at steady rates. Stoved goods quiet. Foreign refined unaltered. Tate's cubes, firsts, 24s; seconds, 23s; crushed, —; Liverpool crystals, firsts, 23s 6d; small, 22s 9d; seconds, 22s 6d; granulated, 21s 9d; Martineau's cubes, firsts, 23s; seconds, 22s 6d; titlers, 23s 3d; pulverised, 22s 6d; chips, 22s 6d; granulated, 23s 3d per cwt. Beet rather irregular. Closing firmer. Sales small. May closed, 18s 4½d, less ½ per cent buyers; June sold 18s 4½d, plus ½ per cent., 18s 5½d and 18s 6d; July, 18s 6d plus ½ per cent., and 18s 7½d; August, 18s 8½d, 18s 9d less ½ per cent., and 18s 9d; September, 17s plus ½ per cent., closing 17s 1½d less ½ per cent. value; October sold 14s 8½d and 14s 9d; November, December, sold 14s 3d.

TEA.—The auctions of 8,000 packages China and 7,100 packages Indian, went without quotable change. China terminals steady. Indian rather easier.

COFFEE.—Auctions small, and attracted only moderate attention. The assortment included a large proportion of pale and common grades, which were in many cases bought in, more suitable grades selling rather unevenly, and occasionally in buyers' favour. Futures quiet, easier. Closing slow. New York opened unchanged to 10 points down. Havre, afternoon report, May, 88½f; September, 89f; December, 89f; March, 88½f; Hamburg, May, 74m; September, 73m; December, 72½m; March, 71½m; Amsterdam, 50c.

SPICE.—The auctions went flatly, and only a small business was done. Of 2,415 bags black pepper about 200 bags sold; Singapore, 2½d to 3d; Lampong, 2½d; West Coast Penang out at 2½d. 851 bags white; a few lots Penang sold, 3 5-16d; Singapore bought in, 4½d to 5d for fine; and two cases superior sold, 7½d. 770 bags Pimento, 50 bags sold 3d, rest out at 3½d to 3½d. 220 bales Zanzibar cloves, a few lots sold, 3½d; one lot, 4d; rest out 4½d. 2 bags Amboyna sold, 4d. 104 packages Penang taken out; 9 cases Penang nutmegs sold, 68s at 2s 11d, 80s at 2s 3d. 9 cases Travancore out, small 2s 1d to 2s 3d. 53 packages West Indian sold, 69s to 85s at 2s 1d to 2s 6d; small, 1s 5d to 1s 9d. 12 cases Penang mace out, 1s 7d to 1s 10d. 23 packages West Indian sold, 1s 6d to 1s 10d per lb. 254 packages Cochin ginger, part sold, rather in buyers' favour, 63s 6d; fine cut, 94s to 100s. 151 packages Japan, part sold, 50s. 50 bags African out, 41s. 445 barrels Jamaica, mostly sold, 63s 6d to 75s; 8 barrels green sold, 16s 6d per cwt. 18 packages Zanzibar chillies bought in, 55s; 55 packages Sierra Leone sold, 38s. 129 packages capsicums bought in; Madras, 30s; Japan, 16s per cwt. 171 bags long pepper withdrawn.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended May 6th 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities	
	1892.	1893.
Animals living:—		
Oxen, bulls, cows, and calves	9,791	3,598
Sheep and lambs	—	625
Swine	—	—
Fresh meat:—		
Beef	44,013	21,284
Mutton	67,904	77,441
Pork	1,442	895
Salted or preserved meat:—		
Bacon	63,593	47,160
Beef	12,398	2,560
Hams	19,668	17,247
Pork	8,847	2,352
Meat unenumerated, salted and fresh	4,223	4,186
Meat preserved, otherwise than by salting	15,254	5,276
Dairy produce and substitutes:—		
Butter	42,993	46,890
Margarine	28,082	19,197
Cheese	17,581	11,984
Condensed milk	7,751	6,514
Eggs	229,800	244,005
Poultry and Game	5,449	3,747
Rabbits, dead (not tinned)	567	254
Corn, Grain, Meal and Flour:—		
Wheat	634,271	1,256,466
Wheat Meal and Flour	439,624	400,852
Barley	179,668	269,656
Oats	272,603	287,597
Pease	34,061	28,224
Beans	61,983	56,404
Maize or Indian Corn	478,142	611,635
Fruit, Raw:—		
Apples	31,379	41,801
Oranges	—	73,734
Lemons	151,721	26,326
Cherries	—	686
Plums	—	—
Pears	23	—
Grapes	278	396
Unenumerated	10,812	15,867
Hops	202	2,334
Vegetables:—		
Onions, raw	141,406	166,234
Potatoes	23,990	78,194
Unenumerated	24,905	17,149

* Not separated in 1892.

Statistical Office, Custom House, } T. J. PITTAR.
London, May 8th, 1893.

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SPECIAL NOTICE TO OUR READERS.

Many of our subscribers having pointed out to us how useful a column for questions and answers would be, we have pleasure in informing our readers that we have arranged with eminent sanitary, analytical, and legal experts, who will be pleased to answer and advise gratis through this column, upon any questions of procedure or difficulties on which information is required.

We would be pleased if readers of this journal, in enquiring for samples of any of the preparations advertised in it, would mention the name of the journal in their enquiry.

Food and Sanitation.

SATURDAY, MAY 20, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

DR. CAMERON'S BILL AND BUTTER.

AGAINST Dr. Cameron's Bill to Amend the Sale of Food and Drugs Acts, the Glasgow authorities, the Strand Vestry, the Islington Vestry, Camberwell Vestry, the Vestry of St. George, Hanover-square, and a few other local authorities have petitioned. As to the vast body of agriculturists, English and Irish butter producers and dealers, County Councils, &c., they do not even seem to know that such a measure is before the House of Commons. And yet the Bill, were it to become law, would destroy root and branch the English and Irish butter trade. County Councils are spending money in teaching dairy farming, hoping to develop this industry, but they do not spend one second in the consideration of a Bill now before Parliament that would stultify their educational dairy farming work. Butter merchants appear equally unsuspicious of a measure that would drive the whole of the trade into the hands of the Hamburg and other continental thieves, and would make butter adulteration universal in the United Kingdom. That such folly and shortsightedness can exist is astounding. It is due no doubt to the artful line adopted by Dr. Cameron in his "Free Thievery Bill." At first sight it appears perfectly fair that the retailer should not be punished for adulteration if he can prove that he is not personally guilty of it. Hence, there is a certain plausibility about the "warranty" plan, and Dr. Cameron's proposal to make the invoice a "warranty" finds acquiescence. Under Dr. Cameron's proposed bill, any retailer who is prosecuted for selling margarine as butter, would only need to produce his invoice. If the substance were invoiced to him as butter, no magistrate could convict, but would be compelled to dismiss the case. Now let us consider the effect of this proposal. It would not only ruin

the English and Irish butter trade, but it would make "Free Fraud" universal. At the present time thousands of tons of "butter mixtures" as they are called, i.e., butter mixed with margarine, come into this country from the Continent, every pound of which, thanks to the apathy of our authorities is sold as pure butter. A large quantity also of genuine butter is now imported, but once Dr. Cameron's Bill becomes law, no one would need to either import or sell in any way any genuine butter. The Hamburg or Dutch margarine merchant needs but to invoice his margarine as butter,—that constitutes a warranty for the wholesale dealer in this country,—the wholesale dealer then only needs to invoice in like manner the margarine to the retailer as butter. Suppose that a Food and Drugs Act Inspector were to prosecute the retailer for the fraud, the retail vendor would, were Dr. Cameron's thief-protecting Bill law, only need to produce his invoice on which the article was described as butter, and the prosecution would collapse. "Yes, but," say Dr. Cameron's apologists, "you can prosecute the wholesale dealer." Dr. Cameron's Bill does not make any provision for such a prosecution; but even assuming that it did, and that at great trouble and expense the wholesale dealer were to be prosecuted, he, in his turn, would only need to produce his invoice, and the prosecution would again collapse, inasmuch as his invoice would constitute a "warranty." To prosecute the Hamburg swindler who invoiced the margarine as butter would be impossible; and, indeed, no one would take that trouble, as he is outside the jurisdiction of our courts. The wholesale dealer would know perfectly well by the price at which he bought the stuff that it was margarine, and the retailer would also know that equally well; but all three—Hamburg thief, wholesale thief, and retail thief—would work in unison to play the game and plunder the public. Any practical, common-sense man can see what would be the result of this rascally "Free Fraud" bill. It is safe to prophecy that were it to pass there would not be within three months of its becoming law one ounce of unadulterated butter coming to this country from Denmark, Sweden, Brittany, Italy, or anywhere. It would all be mixed with margarine in large quantities and invoiced as pure butter, and Dr. Cameron's Bill would require to be repealed before the fraud could be stopped. The effect upon the English and Irish pure butter trade would be disastrous. The foreign margarine and butter mixtures would be sold to retailers as genuine butter at ten to twenty-five or more shillings per cwt. less than English and Irish genuine butter, and our own trade would be literally squelched. Butter and other adulterations make it hard enough now for home industries to succeed, and yet the propounder of this idiotic measure has the impertinence, out of his colossal conceit and ignorance, to threaten his Glasgow opponents with punishment at the polls, and to assert that his critics are wrong in law and in fact. It is high time that agriculturists, butter dealers, County Councils, Vestries, and all whom this stupid effort at legislation would ruin, demanded that Members of Parliament should oppose the Bill, and that a Royal Commission on adulteration should be appointed. It seems to us that many Public Analysts, Medical Officers of Health, and Food and Drugs Inspectors, &c., who ought to have made representations to their local authorities as to the real character of this measure have neglected to do so, or we would have seen many more protests against it. It is an astounding instance of short-sightedness that neither the Central and Associated Chambers of Agriculture, the Home and Foreign Produce Exchange, the Cork Butter Market Trustees, the English Dairy Associations, Lord Winchelsea, his Agricultural Association, the agricultural journals, or the Colonial Dairy Experts, have uttered one word of warning, or appear to even know that so dangerous a Bill is before the House of Commons, and would have passed its second reading but for our exertions. The question of preserving what remains of our home industries is surely worth some thought. The watchdogs of agriculture have long been toothless, it would now appear as though they had become blind.

THE VINEGAR IMPOSTURES.

MORE PECULIAR EXPERT EVIDENCE.
SOMERSET HOUSE APPEALED TO.

Mr. Harry Grimshaw, F.C.S., ought to live in Norwich. There is a thoroughness about his expert testimony that qualifies him for residence in the classic city patronised by the "Ten per cent. wheaten flour and mustard" king. Mr. Grimshaw made his bow to the public as an "expert," at Hanley, on the 10th, before Mr. H. Wright, Potteries Stipendiary, when David Parkinson Norton, of the White Hart Inn, Hanley, was summoned for selling adulterated vinegar. Mr. A. Challinor, Town Clerk, prosecuted, and Mr. Richardson (instructed by Mr. Hunt) appeared for the defence. On the 6th ult. a Mrs. Sarah Wood, acting under the instructions of Mr. S. Salt, Sanitary Inspector, purchased a pint of vinegar at defendant's house, which Mr. J. Baynes, Borough Analyst, certified did not contain more than 10 per cent. of real vinegar, the rest being coloured acetic acid. Mr. Richardson contended that the case must be necessarily

subject to the definition of what vinegar was. The *Materia Medica* stated that vinegar might be obtained from a variety of substances, and varied in its quality according to its source. In this country it was prepared from malt, beer, cider, sugar dissolved in water, with the addition of a little brandy and yeast, and from other sources. Acetification, as the process was termed, consisted in the conversion of alcohol into aldehyd and water, and the former of these into hydrated acetic acid. The vinegar of commerce consisted of this acetic acid diluted and contaminated with organic impurities. According to this definition vinegar might not necessarily be the product of the fermentation of malt, and he submitted that the article in question was a compound known and recognised as vinegar all over the country. It contained all the ingredients to be found in the article of commerce called vinegar, and as this varied in quality according to its source, the question of the degree in which those ingredients were used was not material to the issue. With regard to the question of prejudice to the purchaser, he said the analyst's certificate did not disclose that the purchaser would be prejudiced; and he argued that a vinegar carefully prepared from acetic acid was really the best for domestic and medicinal purposes.—The Stipendiary said that the British Pharmacopœia described vinegar as an acid liquid, prepared from the mixture of malted and unmalted grain by the acetous fermentation, and he should be bound by that definition in deciding the case.—Mr. H. Grimshaw, F.C.S. Lond., and late Demonstrator of Chemistry at Owen's College, was called for the defence. He stated that properly prepared vinegar ought to contain from 4 to 6 per cent. of acetic acid and about 5 per cent. of extracted matter, with a specific gravity of from 1·017 to 1·019. He had analysed the defendant's portion of the vinegar in question, and found that it contained 4·3 per cent. of acetic acid, 0·8 per cent. of extracted matter, and had a specific gravity of 1·009. The balance was water with some colouring matter. In his opinion it was good, wholesome vinegar, and to be preferred for domestic and medicinal purposes. (We give this opinion of Mr. Grimshaw prominence because it ought to interest his fellow members of the Chemical Society. Medical men also will be pleased to note the assumption of the functions of the medical man by the chemist). He failed to understand the certificate of the borough analyst as to the 10 per cent. of real vinegar, because if he assumed that the vinegar was malt the proportion would be 20 per cent., and if wine it would be 50 per cent.—In reply to the Stipendiary, the witness explained that pyroligneous acid was an acid liquid prepared from wood by destructive distillation, and that acetic acid was purified pyroligneous acid. If a mixture containing one part vinegar and nine parts acetic or pyroligneous acid were submitted to an analyst, he would be able to ascertain its component parts.—The Stipendiary said he was not concerned for what the manufacturer called vinegar, but for the public, and after some discussion the case was adjourned so that the third portion of the vinegar might be submitted to the Somerset House authorities for independent analysis.—The case is of considerable importance, as the manufacture of vinegar from acetic acid or pyroligneous acid is largely carried on, and the defendant has already paid over £50 in fines and costs imposed upon other persons who had sold what was held to be adulterated vinegar purchased from him.

At the Birmingham Police Court, on the 5th, before Messrs. Ryland and Fisher, William Osborne, 77, Hope-street, was summoned, under the Food and Drugs Act, for selling adulterated vinegar. Mr. Bell, from the office of the Town Clerk, prosecuted. Mr. Bell said that on the 13th April Inspector Davis called at the defendant's shop, and asked for half a pint of vinegar. He was served by Mrs. Osborne, and paid a penny for it. The officer told her he should submit it to Dr. Hill for analysis, and she then said she did not sell it as malt vinegar. Dr. Hill analysed it, and his certificate showed that it consisted of 80 per cent. of pyroligneous acid diluted with water and coloured. Dr. Hill explained the manufacture of vinegar. He said that this acid, diluted as it was, was not necessarily injurious to health. It was rather a fraud, for the pyroligneous acid was much cheaper than vinegar. Vinegar was derived from the change of alcohol into acetic acid, and the alcohol might be furnished by wine, as in France, wort or beer, as in England, or cider, as in America and England. So produced, vinegar contained besides acetic acid some other ingredients in smaller quantity, which imparted to it a pleasant aroma and flavour, and doubtless rendered it more suitable for dietetic use. Those ingredients were extractive matter, alcohol, acetic ether, sometimes gum, and salts, including acetates, phosphates, &c. Pyroligneous acid had the same chemical composition as acetic acid from any other source, but had no connection with alcohol. It was produced by destructive distillation of wood. It was very impure, being mixed with tarry matters, creosote, wood spirit, and other irritating ingredients, from which it had to be purified by complicated chemical processes. Vinegar must be obtained from an alcoholic liquid. It resulted from the conversion of alcohol by oxygen into acetic acid, and it must be the indirect result of alcoholic fermentation of some saccharine liquid—in other words, of the conversion of the sugar of such liquid into alcohol, and alcohol into acetic acid. The value of the pyroligneous acid was, he should think, about 4d. a gallon, whereas pure vinegar would be about a shilling a gallon. Pyroligneous acid had nothing to do with alcohol whatever. Defendant said he did not know what vinegar was composed of. Mr. Carter (magistrate's clerk): You never heard so much about vinegar before? Defendant: No. He was sorry he had committed an offence, but he had no knowledge that he was doing wrong. He bought the liquid as vinegar from the Handsworth Vinegar Company, and it was supplied as such. He had no warranty that it was vinegar. He had been given to understand that the liquid had been

sold by the company in Birmingham for a number of years as vinegar. Mr. Fisher: After hearing what Dr. Hill said, it is a good thing, then, somebody has been found out. Defendant was fined 5s. and costs. William Kirby, 69, Digbeth; Thomas M. Fincher, 37, Grange-road; and Walter Smart, 115, Moseley-road, were also summoned for selling adulterated vinegar. Mr. Jaques appeared for Kirby and Fincher, and Mr. Cochrane for Smart. On the application of Messrs. Jaques and Cochrane the cases were adjourned for fourteen days, as the manufacturers of the vinegar wished to have an analysis. Mr. Jaques said the question whether vinegar composed as in the case of Osborne was vinegar under the Act or not would be fully gone into in the defence which would be raised.

A SUGGESTION TO GIVE THE INSPECTOR "ONE UNDER THE EARHOLE."

WHY DID THE MIDLAND VINEGAR COMPANY WATCH THE CASE?

At Wolverhampton, on the 10th inst., Henry Lloyd (forty-eight), grocer and baker, Alma-street, Willenhall, was summoned for refusing to sell a pint of vinegar required by Mr. J. E. Morris, the inspector under the Food and Drugs Act, for the purpose of analysis; further with committing damage to the vinegar and assaulting an assistant inspector. Mr. R. A. Willcock prosecuted and Mr. E. Tildesley defended. The case for the prosecution was that a boy named Toy was sent to the defendant's shop for a pint of malt vinegar. On the vinegar being supplied an assistant inspector named Grassam appeared and took charge of the purchase, at the same time stating that it was required for analysis. While getting the bottles ready to divide the vinegar the defendant caught hold of the jug containing the liquid and threw it away, and put his arm in the inspector's face, and some one suggested to the defendant that he should give the inspector "one under the earhole." For the defence, it was contended that the article was sold as "Midland vinegar," and the defendant did not wish it to be taken away as malt vinegar. The assault was denied. The Stipendiary referred to the serious character of the charge, and said that Acts of Parliament could not be disregarded. The officers must be protected, and the defendant was fined £8 and the costs. Mr. E. Eaden, of the Midland Vinegar Company, Birmingham, watched the case on behalf of that company.

ANALYST'S REPORT.

TO THE COUNTY COUNCIL OF DERBYSHIRE.

My Lords and Gentlemen,

In my capacity of public analyst for the Northern division of the county of Derby, I have received during the quarter ending March 31st, 1893, and duly analysed and reported on, a total number of fifteen samples.

Of ten samples of milk nine were genuine, or of moderately good quality, the remaining one being of suspiciously poor quality, but not sufficiently bad to justify its positive condemnation as adulterated.

Two samples of butter proved to be genuine, and one consisted of margarine, two-thirds of it being fictitious butter.

Two samples of vinegar were genuine and of average strength.

It will be seen that of the fifteen samples examined, only one this quarter was condemned as actually adulterated; but this fact I believe to be due to causes other than the general decline of adulteration in the county, since, previous to the present quarter, my reports have shown that the proportion of adulterated samples to the total number received was at about the maximum to be found in any part of the county.

I may take this opportunity of stating that I cordially endorse the remarks made by my colleague, Mr. Hehner, in his last quarterly report, respecting the insufficient number of samples which have in the past been taken in the county of Derby. The number of different establishments for the sale of foods and drugs in North Derbyshire is about 3,300, and I believe there is nearly an equal number in the southern division of the county, making about 6,600 in all. At the past rate of purchasing samples, namely, about 100 per annum, it is evident that it would take the inspectors 66 years to make a single round of the dealers! Hence, the very small chance of detection, and the insignificant fines commonly inflicted when adulteration is proved, act as a distinct incentive to adulteration on the part of dealers inclined to be dishonest. A man selling 20 gallons of milk a day at 4d. a quart, and adulterating it to the extent of 10 per cent., will make £48 13s. 4d. illicit profit per annum; and as the chance of his being visited by the inspector is extremely remote, it pays him much better to make an extra £1 a week illicit profit and take the slight risk of a 5s. or 10s. fine—for which he would recoup himself in three days—than to sell genuine milk.

From statistics in my possession, I recently calculated that the inhabitants of Sheffield paid fully £5,000 in 1892 for water sold to them under the name of "milk"; and there is no doubt that the loss to the public in Derbyshire, through unsuppressed adulteration, is much greater than this.

Hence it would clearly be to the interest of the public to have a far larger number of samples of food taken than has been the case in the past, and that when proceedings ensued, steps should be taken to lay forcibly before the magistrates the serious loss to the public involved by the practice of adulteration.

The duty of the analysts merely consists in examining the samples submitted to them, and the inspectors are equally limited by their instructions as to the number of samples they are to purchase.

I beg respectfully to request your most careful consideration of the foregoing facts.

ALFRED H. ALLEN,
Vice-President of the Society of Public Analysts.

ADULTERATION PROSECUTIONS.

MILK.

At the Shirehall, Nottingham, on the 14th inst., Joseph Lovett, milk seller, was charged with selling adulterated milk at Beeston, on the 23rd of April. Inspector Story stated that he purchased 1½ pints of milk off defendant, who was selling it at Beeston. He divided the milk as usual. The result of the analysis was that it was a mixture of 94 parts of milk and six of water. The sample was fresh, and had undergone no change that might interfere with the results of the analysis. Defendant said that he told the inspector that the milk was bought, and he had paid a fair price for it. Fined £2 2s. A similar charge was preferred against George Low, milk seller, at Beeston, at the same time. Mr. J. H. Green defended. The analysis was that the sample was a mixture of 92 parts of milk with added water eight parts. Mr. Green said there was no legal defence, and put in as a mitigation a notice which the defendant had already written to the person from whom he obtained his milk, terminating the contract at the end of the month. The magistrates imposed a fine of £2 10s.

At Sheffield, on the 12th inst., William Johnson, milk seller, of 80, Bawtry-road, Darnall, was summoned for selling milk which was not of the substance and quality represented by him. Mr. H. Sayer (Deputy Town Clerk) appeared in support of the summons, and Mr. A. Neal defended. The evidence was that one of the Corporation inspectors purchased a pint of milk from the defendant in the street, which he said was new. The sample was submitted to the Public Analyst, who certified that it contained 93 parts of milk and seven parts of added water, and also that it was deficient in cream to the extent of one-fourth of that naturally present in genuine milk of fair average quality. Mr. Neal submitted that the defendant was not the person who ought to have been summoned. He was simply employed by his brother to deliver the milk, and was in no way responsible for the quality of the article, nor could any guilty knowledge be proved against him. He thought it an unjust practice on the part of the Corporation to proceed against servants. Mr. Sayer cited a judicial decision in support of the course he had taken, and also pointed out that persons had adulterated milk after it had left the premises of the cowkeeper. The Bench overruled the objection, and evidence was given by the defendant and his brother, who swore that no water had been added to the milk nor any cream extracted. A fine of 20s., and 17s. 6d. costs was imposed.

CONDENSED MILK.

At the West London Police Court, on the 5th inst., Sarah Osborn, of Belmont-road, Chiswick, was summoned for selling a tin of condensed milk from which 80 per cent. of the fat had been abstracted. Mr. Finnis said it was an important case, as it would govern many others in the parish. He had the Analyst and Medical Officer of Health present, as he was instructed that the contents of the tin was absolutely valueless and injurious. The defendant said she sold it in the same state as it was sold to her. It was sold as skimmed milk. The magistrate, Mr. Haden Corser, was informed that there was an appeal pending against a conviction of Mr. Curtis-Bennett in a similar case. The summons was consequently adjourned.

BUTTER.

At Worship-street, London, Michael Gormberg, shopkeeper, was summoned for selling as butter an article adulterated with 70 per cent. of margarine. The defendant said the article was sold by his daughter in a wrapper properly stamped with the nature of the compound, and his daughter corroborated his statement. The Sanitary Inspector denied it, and said the article was wrapped in blank paper. Mr. Bushby elicited from the daughter that they had butter at 1s. and margarine at 1s., but as the purchaser in this instance merely said "half-a-pound of shilling," she served margarine. Mr. Bushby said the defence was ingenious, but he did not believe a word of it. He fined the defendant £15. Frederick Pearson, of Brick-lane, Bethnal Green, summoned for exposing margarine for sale without its being labelled, was fined £14 pounds and 23s. costs. William Obeney, of 211, Bethnal Green-road, pleaded guilty to selling as butter an article which was 96 per cent. margarine. He was fined £19.

COFFEE.

At Westminster, on the 11th, Edward Rugg, grocer, of 113, Lupus-street, Pimlico, was summoned by the St. George, Hanover-square Vestry for selling adulterated coffee. Mr. Hitchens, prosecuted for the parish, and Mr. F. W. Beck defended. Mr. Taylor, the Inspector, said that he asked for coffee, and denied the assertion of the shopman that he was told it was "mixed." At any rate the sample—which was bought at the rate of 1s. per lb.—was served in an orange coloured wrapper with a printed announcement that it was a mixture of chicory and coffee. In the shop window was a large bill, "Coffee, 1s. Blended with finest chicory." The contention of the defence was that the real nature of the compound was brought to the attention of the Inspector by the notices. Mr. de Rutzen said the Inspector asked for the real article—coffee—and a coloured paper wrapper with printing on it did not protect the seller. Including costs, he imposed a penalty of seven guineas.

At the West London Police-court, on the 5th inst., David Morgan, of Duke's-road, Chiswick, was summoned for selling coffee which, on being analysed, was found to contain 45 per cent. of chicory. Mr. Finnis, Clerk of the Chiswick Local Board, supported the summons. It appeared that a quarter pound of coffee was asked for, and for which 4d. was paid, nothing being said that it was a mixture. The defendant, in explanation, said his wife, who served, did not think of mentioning that it was a mixture of coffee and chicory. A fine

of 20s. was imposed, with 12s. 6d. costs. Sarah Osborn, of Belmont-road, Chiswick, was also summoned for selling coffee which contained 50 per cent. of chicory. Mr. Finnis said the defendant's shop was in a poor neighbourhood, the people not being able to protect themselves. The defendant said it was what she sold for coffee. She was not aware that she had to state it was a mixture of coffee and chicory. It was wrapped up in a paper bearing a notice that it was a mixture of coffee and chicory. The cover was produced, but it was found that the notice could not be seen from the outside. Fined 10s., with 12s. 6d. costs.

COCOA.

Harry Green, grocer, of 59, Chapel-street, Clerkenwell, was summoned, at the instance of the Clerkenwell Vestry, at the Clerkenwell Police-court, on the 10th inst., for selling adulterated cocoa. Ada Bismire proved purchasing half-a-pound of cocoa from defendant's shop on March 29th, at the direction of Inspector Bartlett. The sample was sent to the Public Analyst, and his certificate showed that the cocoa was adulterated with 40 per cent. of sugar and 15 per cent. of starch. Defendant said that what was sold was chocolate powder. It was impossible even to buy pure cocoa at 5d. a pound, the price paid in this instance by the purchaser. Mr. Sandeman, who appeared for the prosecution, said he did not contend that pure cocoa could be purchased for 5d. a pound, but people were deceived in believing that they were buying cocoa, whereas the article was merely a mixture. In this case there was a bowl on the counter with the words, "Splendid cocoa, 5d. a pound." Mr. Bros said shopkeepers were bound to serve customers with exactly the article asked for. Defendant further stated that he had protected himself from prosecution by wrapping the cocoa up in a packet upon which was printed matter, stating that the article sold was a mixture. Mr. Bros: Did you tell the purchaser that it was a mixture? Defendant: No. Mr. Bros: Then you ought to have done. You must pay a fine of 10s. 6d., and costs.

James Hale, grocer, of 11, Exmouth-street, Clerkenwell, was also summoned for selling, on March 29, cocoa which was found, when analysed, to be adulterated with 35 per cent. added sugar and starch. Defendant said one tin from which he served the article had upon it, in large letters, "Chocolate powder," which was really what was sold. The cost of pure cocoa was 1s. 8d. a pound. A fine of 10s. 6d. and costs was imposed.

OATMEAL.

At Knarborough on the 10th, Thos. Lumley, grocer, Aldborough, was summoned for selling adulterated oatmeal. Mr. F. Capes appeared for the defendant. Inspector Gamble said he purchased 2lbs. of oatmeal at the defendant's shop, for which he paid 4d. The certificate of the Public Analyst showed the sample to be adulterated with 16 per cent. of barley. For the defence it was stated that barley and oats had been grown together and the mixing was unavoidable, and the firm from which it was received had never had any previous complaint. The Bench dismissed the case on payment of costs, 14s.

WHISKEY.

At Knarborough Petty Sessions, on the 10th, Mr. Gamble, Inspector to the County Council, summoned Charles Bolton, innkeeper, Aldborough, for selling adulterated whiskey. On the 29th March, complainant purchased of the defendant half a pint of whiskey, and on being sent to the analyst it was found to be 39½ degrees under proof, and to contain 19½ degrees excess of water. Defendant pleaded guilty, and was fined 10s. and costs.

At Rugby Petty Sessions, on the 3rd inst., James Day, Windmill Hotel, Rugby, was summoned by Mr. W. H. W. Parsons, Inspector under the Food and Drugs Act, for selling whisky which was adulterated. Defendant pleaded guilty. Mr. T. M. Wratlaw (Clerk to the Local Board), appeared to prosecute. Mr. W. H. W. Parsons proved purchasing of defendant half-a-pint of whisky, which he informed defendant he required for the purpose of analysis. The report of the analyst showed that the spirit was diluted, and not of the strength required under the Food and Drugs Act, being 36 deg. under proof. Defendant said he had been in business as a publican for twenty-one years. He had had his spirits examined before, and they had always been of the proper quality. The only way that he could account for the whisky not being of the required strength was that on going up stairs to the room where he "filled up" he found the cork out of the bottle. And it would probably have been out for ten or twelve days. Fined £1 and costs 10s. 6d.

RUM.

Henry Wilde, Railway Inn, Butterworth, was summoned at Rochdale on the 3rd, for selling adulterated rum. Sergeant Palmer proved purchasing from defendant on the 13th April a pint of rum, for which he paid 2s. He told defendant it was for the purpose of being analysed, and offered to divide it as required by the Act. Defendant said he did not require it divided. The Sergeant then sealed the rum up in defendant's presence, labelled it No. 946, conveyed it to Dr. J. Campbell Brown, of Liverpool, Public Analyst, the following day, and received back from him the portion produced. When served with the summons defendant said, "I tested the rum in the cellar immediately after your purchase, and found it two degrees against me. My sister mixed some during my absence on business and evidently put too much water in it." The certificate produced gave the analysis as "a mixture of rum and water of the strength as under—31 degrees under proof" (contains 6 per cent. excess of water). In answer to the Chairman the Clerk said 25 per cent. of water was allowed. The sample of rum produced contained 31 per cent. of water. A fine of 5s. and costs was imposed.

CIRCULAR NOTES.

The Bury (Lancashire) Town Council have at last appointed a Borough Analyst, in the person of Mr. T. J. Hutchinson, whose appointment awaits the ratification of the Local Government Board.

The Haddingtonshire County Council possesses a remarkable genius, whose administrative tact and ability is of too rare a stamp to be confined to the narrow sphere of a county board. At the last meeting of the Council, when this brilliant bumpkin was in the chair, he announced that the Council had received a communication from the Society of Public Analysts regarding the working of the Sale of Food and Drugs Acts, objecting to the referees of the Inland Revenue. He added, amid the laughter of his colleagues, that he had simply marked the letter "cheeky proceeding," and he advised the Council "to keep their fingers out of that pie." This essay of the chairman's was met by a pertinent remark from Mr. Thomson, another member, that the Food and Drugs Act seemed to be a dead letter in the county. "Oh," replied the chairman, "it shows that the food is very satisfactory." Whereat there was more laughter. We really think that such wit and wisdom is lost in Haddington; and we hope that before long some complacent constituency will send this egregious county councillor to Parliament. We are curious to see him and to speak with him: it is so long since we met a clown in broadcloth who could "cheek" men of intellect and jest at permissive poisoning and plundering to the tune of "hear, hear, and laughter," as the local reporter puts it.

A knowledge of wild plants and their properties is one of the necessary subjects of instruction in elementary schools, especially in rural districts, and we wonder it is not made compulsory. The necessity for it is shown by a sad case of poisoning by wild hemlock, at Tyne Dock, last week. Some school children gathered a quantity of a variety of this plant known as "fool's parsley," and according to the evidence of one of the party, a little girl of eight named Pringle, her sister "said it was cabbage, and she should eat some." Another boy and girl, named Shafter, who was still younger, followed her example. All three were soon afterwards taken ill. One "complained of her legs as if they were tired"—a common symptom of hemlock poisoning—and her head afterwards got bad." Pringle ultimately recovered under treatment, but the two Shafterns on reaching home gradually became unconscious, and died the same afternoon within twenty minutes of each other. It is a pathetic circumstance that the father had only gone to sea a week ago, leaving these, his only children, in their mother's care.

THE HOUSE OF COMMONS AND SOMERSET HOUSE.

Lord George Hamilton has taken up the case of the Public Analysts against Somerset House on the question of milk standards, and he has given notice of his intention to ask the following question of the President of the Local Government Board on the 30th inst. :—

If his attention has been directed to a paragraph in a letter addressed to Dr. Bell, the Principal of the Inland Revenue Laboratory, Somerset House, by the Society of Public Analysts, in September, 1892, and signed by 119 members of the society, including nearly all the Public Analysts in the United Kingdom, in which they state that "they have long observed with regret the practice of certifying, in a manner liable to be interpreted by the court as definite, on samples of milk which have been kept for a considerable time, and which, therefore, when examined, must have been in such a condition as to preclude any trustworthy opinion being formed respecting their original composition; also that the formation of any reliable opinion is in a great many cases impossible under such circumstances owing to the very irregular character of the changes milk undergoes on keeping, and therefore express a hope that in future it will be clearly stated in all certificates that owing to decomposition it is impossible to obtain analytical results comparable in point of accuracy with those yielded by the milk when it was fresh." And, whether there is any objection to directions being given to Dr. Bell to comply with this request, especially if the practice complained of has led in any instances to failure of justice?

HOW BELGIAN "BEEF" IS PREPARED FOR THE ENGLISH MARKETS.

Colonel Howard Vincent has given notice to ask the following curious question of the President of the Board of Trade on the 6th of June: "If his attention has been called to the statement that the steamship "Sheffield," which collided on the 14th inst., off Yarmouth with the "Londoner," was carrying a cargo of old horses from Grimsby to Antwerp: "If he can say that such shipments are frequent, and if they are consigned to Belgium in order to be made into food for the English market or for what purpose: and, if the port officers of the Board of Trade will have especial instructions to see that no cruelty is practiced in placing the animals, worn out in English service, on board ship and conveying them abroad.

PUBLIC HEALTH NOTES.

The Glamorgan County Council is undertaking a timely inquiry into the sanitary condition of the county. Dr. Williams, the county medical officer, reports of one district, Gorseinon, that the water supply is obtained from four wells, of which only one produces good water. There are no means for the disposal of slop and surface water except as provided for by nature. In various parts the surface water flowed along the streets in unprotected and unpaved channels, thus causing the various streets, roads, and undrained areas to be in a sodden, damp, and dirty condition. There were no means for isolating cases of infectious disease, nor was there any disinfecting apparatus. Typhoid fever and diphtheria were common in the place, and lately there had been several cases of mild scarlatina. Should the place happen to be invaded by cholera, he considered its position a most defenceless one.

Mr. Councillor Richard Morris has written to the *South Wales Daily News* calling attention to the bad sanitation of the Taff Valley. It is an astounding revelation, and certainly calls for the early and earnest attention of the Pontypridd Local Board. He says that the pollution of the river Taff from the bridge near the Tabernacle Chapel to the junction with the river Rhonda is worse than anything that can be found in the Rhonda Valley. Just below the bridge there is a slaughterhouse, where all the blood is washed into the river, and in a shallow part he found not only congealed blood but entrails deposited. He remonstrated with the official, who stated in reply that it was the express orders of the inspector that the blood, etc., should be deposited in the river. The stench from other parts, notably John's-court and near the brewery, was unbearable. Behind the Butcher's Arms Yard the main sewer of the town empties itself into the river at a point outside the current, so as to form a pond of pure sewerage, and the stench is most abominable. In the immediate vicinity the Local Board has its scavenging tip. In a parallel line with the Rhonda Bridge there is a main sewer, and the leakage from that sewer, which is observable to any person, is most serious. It is plain, in the face of this astonishing state of affairs, that if a cholera or typhoid epidemic breaks out in the neighbourhood, the inhabitants of the place are doomed. What have the members of the Pontypridd Local Board to say?

At the spring meeting of the Fife-shire Medical Association at Dunfermline—Dr. Nasmyth, the Medical Officer of Health for Fife-shire, presiding. Dr. Littlejohn, Edinburgh, having read a paper on "The Medical Profession and the Sanitary System," Dr. R. Balfour Grahame, Leven, moved—"That in the opinion of this Association it is inexpedient that Medical Officers of Health should engage in private practice, this being incompatible with the proper performance of their duties as such." Dr. Grahame said he moved the resolution on two grounds—(1) private practice interfered with a Medical Officer's independence of action, and (2) if his private practice was large the public health suffered. Dr. Nasmyth seconded, and the resolution was unanimously adopted. Dr. Nasmyth was asked to represent the Association on the deputation to wait on Sir George Trevelyan in the course of a few days in reference to his ruling on the Probate Duty grant and county Medical Officers.

In his report submitted to the joint committee of Mid-Warwickshire Sanitary Authorities, Dr. Wilson says:—I am still of opinion—and I make this remark in general terms, and without referring to any part of my own district—that the insurance of infant lives, which of late years has developed to such a large extent throughout the country, and more especially in towns, is distinctly immoral, because it tempts to carelessness, or worse, in the nursing of tender lives which require the greatest care; and I make bold to repeat what I have often said before: that the insurance companies which extend their business in this dark and shady field thrive and fatten on the lapsed policies, the premiums of which, if a child continues to live, the poor parents are unable to meet. It is horrible to think that an infant's life is insured to meet possible funeral expenses, and that is the argument used, with the bait of a margin over. No child's life should be insured under five years of age; and I trust that some day soon the Legislature will step in to prevent this temptation to infant-slaughter through neglect or want of proper care—to put it in the mildest terms—on the part of insurance offices which accumulate their funds on the lapsed policies on children's lives.

The Boston Port Sanitary Authority have had under discussion the precautions to be taken against cholera. It is proposed to erect a special landing stage and to hire or purchase a steam launch for the summer, and the authority decided to leave the matter in the hands of Dr. Clegg, the Medical Officer, Alderman J. C. Simonds, the chairman, Councillor Lockwood, and Mr. Wheeler, the surveyor, with power to take the necessary steps.

We commented a week or two ago on the condition of the poorer people of Orkney and Shetland. The report of Dr. Bruce, the Medical Officer for Ross and Cromarty, shows that the Lews Crofters are in no better sanitary condition. They are only saved from the ravaging effects of a pestilence by their hardy, healthful and temperate life; they have to herd together in horrible holes which would in towns breed disease enough to sweep off the face of the earth a whole community, and the resources of civilisation seem to have utterly failed to penetrate these far off islands. Dr. Bruce suggests that the State should interfere. We think so, too, and the first thing that a Sanitary Committee of Inquiry should do is to bring the landowners to a sense of their responsibility in the matter.

A side-issue of an inquest recently held upon the body of a child of foreign parents which had died in an insanitary room in Edward-street, Wardour-street, London, came before Mr. Newton, at Marlborough-street, last Saturday, in the form of a summons taken out against the landlord, Henry William France, an undertaker, of 173, Wardour-street, by Mr. H. Wilkins, the Vestry Clerk of the parish of St. James's, Westminster, for continuing to let the room, or knowingly suffering it to be occupied from the 1st to the 5th inst. A fine of £5 was imposed. Such offences as these are scarcely punishable by fine.

Falmouth and Truro Port Sanitary Authority, have also debated what they shall do, and at their meeting last Friday they favoured an increase of shore hospital accommodation in preference to the acquisition of a floating hospital. The Local Government Board have asked the authority to submit their views as to the practicability of provision for a medical inspection of every ship coming into port if there was a cholera outbreak.

Dr. J. S. Taylor, Medical Officer of Health to the Port Sanitary Authority of Liverpool, tendered his resignation at a meeting of the Liverpool Health Committee on the 4th inst., because of some strictures passed on him by members concerning an alleged case of yellow fever on a newly arrived ship. The acceptance of the resignation was deferred for a week.

Another case of action by a tenant against a landlord for letting insanitary premises was decided in the Queen's Bench last week, but the result was different from that in the Clerkenwell case we previously quoted. It was the case of *Gale v. Harvey*, which came before a Divisional Court of the Queen's Bench Division on appeal from a county court. The tenant in this case found the drainage was bad after the tenancy had begun, but there was no warranty in the contract as to the state of the drainage, and the most which could be proved was that the house-owner had said it was "all right." The county court judge found that it was all wrong, but he also found that there was no fraud on the part of the house owner, and, under these circumstances, the Divisional Court pronounced in favour of the house-owner.

This only shows the necessity for full enquiry by ingoing tenants; and we think that a satisfactory report can only be secured by employing a sanitary expert. The fee required would be a good investment in two out of every three cases.

We are glad to note that the spirited action of Dr. Alfred Harris, in prosecuting the London School Board, for permitting the scandalous state of the drains which was discovered at Yerbury-road Schools, in Islington, has moved the Board to overhaul and repair the drains at Hanover-street and other schools in the district. Every facility is being afforded the Board by the Vestry, and we hope that the recurrence of such a scandal will be avoided by sensible and prompt attention to the requirements of sanitary science.

The sanitary arrangements at Devonport are being well looked after just at present, says the *Western Daily Mercury*. Plenty of water and disinfectants are being used to prevent during the hot and dry weather any outbreak of an epidemic. The arrangements made by the authority to cope with an outbreak of cholera are also very complete. A large field adjacent to the infectious hospital, at Swilley, has been taken, and here cases can be immediately isolated should they be imported or otherwise arise in the town.

At the meeting of the Bootle Town Council, on the 10th inst., Dr. R. J. Sprakeling was re-appointed medical officer of the borough.

Dr. W. J. Brock, medical officer of health, for Mid-Lothian, West Lothian, and Peebles, has fully disproved allegations made against the officials and county authorities of neglect in connection with an outbreak of smallpox at East Benhar. Mr. Thos. Hope, chairman of the Bathgate District Committee, has reported to the Board of Supervision of the Linlithgowshire County Council that the officials showed no lack of energy or promptitude, and he adds that the Committee is of opinion that the authors of the attacks on the officials should be prosecuted for their unfounded libels.

PRACTICAL PAPERS FOR GROCERS.

CHEESE SWINDLES UPON GROCERS AND THE PUBLIC.

We have repeatedly shown grocers that the Food and Drugs inspector and public analysts are not only their best friends, but that the only hope of restoring the grocery trade to a condition in which fair profits for honourable work can be obtained, lies in the cordial co-operation of grocers, analysts and inspectors. We need only cite one instance in support of this truth, viz., that of Dr. Cameron's idiotic coffee clauses in his wretched Bill to amend the Sale of Food and Drugs Act. These clauses were hailed with ecstasy by grocers who did not see the consequences they would entail upon retailers. The Grocers' Federation Executive, and their trade journal secretary, lauded the Bill with thick-headed obstinacy, and were it not for our exertions, and blocking of the iniquitous measure, the harassing, mischievous and ignorant clauses would even now have passed their second reading. We would impress this important case of trade short-sightedness upon the minds of grocers, because it is cunningly devised fraud that causes the list of grocers' bankruptcies to exceed that of all other trades, and that have made the grocer the hardest worked of all shopkeepers for the least profit. It is cunningly devised fraud also that has spread over the length and breadth of the land co-operative and mammoth stores swindling. As we last week showed, the Co-operative Stores filch from their dupes $\frac{1}{2}$ d. to a ld. per lb. by an excess eight or nine per cent. of water made to stand upright by being finely blended and cunningly incorporated with butter—and sold to the public as butter. On their own showing, one society in Lancashire and Yorkshire reap an extra plunder from the consumers of £40,000 per year for *excess water, sold as butter*. Against colossal fraud like this, what chance has the self-respecting grocer of obtaining a livelihood? Very little indeed, for the public do not suspect the fraud, and pay their extra 1s. 5d. to 1s. 8d. on every £1 expended for which they, perhaps, receive 1s. to 1s. 6d. per £1 back in dividend. We maintain that this system of fraud is one to which neither grocers nor their federations should give any countenance, and that the inspectors who, despite misunderstanding and abuse, drag offenders, whosoever they may be, before the courts, do a laudable public work. If grocers, for example, would but reflect upon the loss occasioned to them by cheese swindles, they would save themselves from ridiculous exhibitions of stupidity, such as that made by "A Grocer," who writes from Treherbert on May 8th, and whose nonsense adorns the pages of our contemporary, *The Grocer*, of May 13th. Says this genius (!) :—

"The alleged cheese adulteration case, as reported in your last issue, is, to say the least, very amusing. The superintendent of police seems to have been studying cheese-making extraordinary somewhere, and by his evidence I should think that he would like us to believe that he is an authority on cheese; yet it is very hard to understand where he gets his peculiar and one-eyed information from."

"Hoping that the grocers will unite to defend such ridiculous proceedings as are brought on from time to time by inspectors, and which mean heavy expenses to the dealer (but for the inspector, he fights with other people's money)."

The case referred to was heard at Pontypridd on May 3rd, when Mr. Richard Rowlands, grocer, Cidfynydd, Pontypridd, was summoned on a charge of having sold adulterated cheese. Superintendent Jones, the inspector, stated that on March 31st he visited the defendant's shop, and purchased a pound of cheese, which, he stated, he wanted for analysis by the public analyst. He offered to divide the cheese in three parts, but this the defendant declined to accept. The superintendent then sent the sample to the analyst, who forwarded him a certificate, stating that it contained sixty-two parts of water, which was at least twenty parts more than ought to be mixed therewith, or, in other words, the sample contained 20 per cent. more water than should be present, and the quality, too, was inferior.—The Stipendiary: This is a very curious case. What would you say if a baker put more water in his bread than was necessary?—The Superintendent: That, sir, would be dried up by the heat, but this cheese seems to have been put in water to soak.—The Stipendiary: Is water injurious to health?—Superintendent Jones: That is not the case, sir. This is a case of defrauding, for I paid 7d. for what was worth 5½d.—The Stipendiary: I do not see why he should not have sold it cheaper. What section is it?—Superintendent Jones: Section 6. I contend that I had cheese and water, when I asked for cheese.—Mr. Edwards: You had a very excessively moist cheese, and I suppose it had been too long in the water.—Superintendent Jones: That's my belief, sir.—Mr. T. P. Jenkins: And it was done to increase the weight, I suppose?—Superintendent Jones: Exactly so. The Stipendiary: He demanded cheese and got cheese.—Superintendent Jones: No sir; I had cheese and water. It is on all fours with a case where I ask for milk and get milk and water. The Stipendiary: But water is one of the principal ingredients of cheese, for you admit yourself that 20 per cent. ought to be water or moisture. Now, if after this cheese was made, by some process water was added, then it would be quite a different thing, but you have not proved it to be so.—Superintendent Jones: I say that it is put in water for absorption. Mr. Edwards:

It looks like it. The Stipendiary: No shopkeeper will buy cheese until it is thoroughly dry, for if it is wet they give you less money for it. One of the tests of the value of cheese is its thorough dryness. Mr. T. P. Jenkins: That water in the cheese would be absorbed and would pass away in time.—The Stipendiary: What I believe is, that the defendant sold the cheese before it was fit for consumption.—Superintendent Jones: Then he should not have sold it.—The Stipendiary: It is cheese all the same, but of an inferior quality.—Superintendent Jones: No, sir, it is cheese and water.—Mr. T. P. Jenkins: Perhaps you had it cheaper on that account.—Superintendent Jones: No, sir, I paid 7d. for it, while it was worth just 5½d. I can get best American for 6d.—The Stipendiary: It is very evident that the cheese had not been kept long enough, it is generally kept six months or more, but at the same time I cannot see how it is an offence to sell it when quite fresh. Mr. Edwards: Is it his own make?—Superintendent Jones: No, he bought it at Pontypridd market. Defendant: I bought it on Wednesday and sold it to Superintendent Jones on Friday. It was skimmed milk cheese, such as people generally eat with their bread and butter. There is a great demand for that kind in our district. I believe that there is not much whey in it. The Stipendiary: Can anyone prove that this cheese has been made heavier by soaking in water after it was made, for in that case it would be added water. If it was water used in the manufacture, then it would be a different thing, for it could be sold at a less price.—Superintendent Jones: I shall ask the public analyst and the county medical officer to come here next Wednesday, for it is a matter of very great importance to the district to have good food. The Stipendiary: The whole question will rest upon their opinion as to whether the cheese has been soaked to increase the weight or not.—Superintendent Jones: In that case I shall ask you to adjourn the case for a week so that the public analyst and medical officer of health may attend. The Stipendiary: I am convinced that you have no case if the cheese is proved to be wet through not having time to dry.—Superintendent Jones: Surely, sir, you must have the case fully thrashed out for the benefit and protection of the public. The Stipendiary then consented to adjourn the case for a week, in order that the analyst and county medical officer might attend.

Now, what we would particularly call the attention of grocers and the public to is the fact that this cheese, assuming the report to be correct, contained 62 per cent. of water. Dr. Edward Smith, M.D., L.L.B., F.R.S., in "Foods," page 124, gives the proximate composition of "skim" cheese, of which this Pontypridd cheese is a specimen:—

Water..	..	..	..	..	44	per cent.
Nitrogenous ..	..	..	..	..	44·8	"
Fat ..	..	..	..	..	6·3	"
Salt ..	..	..	..	..	4·9	"

100

Dr. König in a series of some hundreds of analyses of cheese, gives the water in skim milk cheese as 46 to 50 per cent. The percentage of water in Cheddar cheese averages 34 per cent.; Gloucester cheese averages 34 per cent.; Cheshire cheese averages 34 per cent.; Gorgonzola cheese averages 37 per cent., and Dutch cheese, which is the truest type of the skim milk cheese, 36 per cent. of water. The cheese in this Pontypridd case contained 62 per cent. of water—i.e., 12 per cent. more than the highest average skim milk cheese, and 18 per cent. more water than it ought to have contained. The reason for this excess water is obvious. It is left in the cheese designedly by makers for purposes of fraud. The extent to which this kind of roguery has developed in recent years is as shameful as it is alarming. With cheese as with butter, unscrupulous makers deliberately incorporate in the manufactured cheese or butter, or leave in it an excess of eight to eighteen or more per cent. of water over and above the amount naturally present in genuine cheese or butter. It is an ingenious fraud and a paying one, but its effect upon grocers and the public is very far from being perceived by such correspondents as the Treherbert grocer. If the vendor of such cheese as this a Pontypridd do a quick trade, then the purchaser is the only sufferer—he paying 7d. per lb. for an article containing at least 16 per cent. excess water, which he buys as cheese, i.e., he pays 1½d. per lb. on every pound of cheese purchased, for water made to stand upright, and sold to him as cheese. Now what the law is intended to effect is neither the injury of the grocer nor the consumer, and, plain as it must be, that this excess water sold as cheese, is sold to the prejudice of the purchaser to the extent of at least 1d. to 1½d. out of each 7d. paid for it, there is another aspect to it which grocers unhappily for their own best interests pay little regard to. The grocer who has not got a quick sale for this fraudulent cheese is being swindled himself, without his being aware of it, of a heavy amount. The dishonestly made swindling cheese will, by being kept a short time, lose its excess water at a rapid rate, and the grocer dealing in such swindling cheeses, will find that he, and not his customers, has lost eight to ten shillings out of every 55s. by water evaporation. It is the same with excess watered butter. The fraudulent maker leaves in 20 or even 25 per cent. instead of the 12 per cent. butter should have, and the grocer who sees it flood the butter stand and swamp his counters, does not realise that 5s. to 12s. out of every 100s. he has expended is thus unknown to him utterly lost. Beset with

ingenious swindles of this character, there is scant cause for wonder that so many grocers become bankrupt. The Food and Drugs Act inspectors who bring such cases to light, deserve the best thanks of the grocery trade as well as of the public, and, indeed, the Aberdare grocers themselves supply an answer to the complaint of the Treherbert one, for at a meeting of the Aberdare Grocers' Association held last week, the chairman, referring to the need of higher standards of morality in trading, said some traders were guilty of selling margarine for butter and lardine for lard. Mr. Hezekiah Prosser said that if the Inspector of Police at Aberdare was as active and energetic as Superintendent Jones at Pontypridd, this would soon be put a stop to.

We trust to see a stop put to this fraud of excess water in cheese and butter, not only in Wales, but throughout England, and Superintendent Jones has deserved well of the public and of grocers by bringing the matter forward.

CORRESPONDENCE.

To the EDITORS of FOOD AND SANITATION.

"SOMERSET HOUSE CERTIFICATES."

SIRS,—I have read with much interest the letter of Mr. Otto Hehner, in your issue of April 29th, respecting a statement in my recent hints addressed to Food and Drugs Inspectors. The statement is to the effect that "the certificate of an outside analyst, except, of course, that of Somerset House, should never be allowed to be introduced into a case or even referred to." I cannot possibly understand how any "grave doubt" can be attached to a statement like the foregoing, especially with reference to the certificate of Somerset House. In all such cases the Justices themselves apply to the Somerset House authorities for an opinion, they themselves receive the certificate, and what action an inspector can take in preventing its being "introduced into the case and referred to," I quite fail to see.

But, sir, coupling your leading article with Mr. Hehner's letter, I perceive that the point is carried a little further, and it is urged that the Somerset House Certificate should be objected to as evidence. This advice, I am afraid, must be taken with the greatest caution, if, indeed, it be not decidedly advisable to disregard it altogether. It is quite customary with myself to inform the magistrates that the Somerset House Certificate is an opinion, which they can override if they so please, but it will be well to remember that this certificate is obtained under most peculiar circumstances, it being an absolute impossibility for either the prosecution or defence to obtain it, that prerogative resting entirely with the Justices, by virtue of the power conferred on them by the Act. It is, therefore, clear that the certificate differs very materially from any other evidence, called either for prosecution or defence.

Rightly or wrongly, the Somerset House Certificate is looked upon as conclusive; and speaking as an inspector, I think it very desirable that there should be a "right of appeal" from the certificates of the public analysts, who, whatever else may be said in their favour, cannot be said to be infallible, for, quoting from your own leading article, "some analysts even rival in incompetence the Somerset House Referees, while others are notoriously corrupt."

Whether the present administration at Somerset House is or is not satisfactory, from a scientific point of view, it is not within my province to pass any opinion; but I consider it adds vastly to the status of the inspector if he is able to acquiesce willingly with the defendant in his application for a portion of the sample to be referred to Somerset House. If an inspector objected to the Somerset House Certificate, *even as evidence*, I hold that although, legally speaking, he may possibly be right, morally speaking he would be wrong; and he would seriously prejudice not only the case, but also his own position and that of the public analyst. I hope, therefore, that inspectors generally will carefully consider the responsibility of raising a serious dispute on the point in a court of law.

That there should be the "right of appeal" from the public analyst's certificate must be admitted by all, and if the present department is not scientifically accurate, and, indeed, absolutely satisfactory, I respectfully hold that its reconstruction is not within the scope of the inspector's duties, nor, indeed, will that end be attained by raising objections based on such legal technicalities.—Yours faithfully,

B. SCOTT ELDER,

Chief Inspector for the County of Durham.
48, North-road, Durham, 9th May, 1893.

THE BATTERSEA INSPECTOR PROTECTS THE POOR.

At the South Western Police Court, William Phillips, Amies-street, Battersea, was summoned for selling milk from which the cream had been abstracted. Mr. Young supported the summons, and Mr. de Rutzen imposed a penalty of £5 and 12s. 6d. costs.

Henry Skerritt, of 35, Hanbury-road, Battersea, was also summoned for a similar offence. Mr. de Rutzen fined the defendant £5 and 12s. 6d. costs.

PUBLIC HEALTH PROSECUTIONS.

An important case was tried at the Bridge Hall, Barnstaple, on the 28th ult., Joseph Lord, master of the Ketch, R.T.B., was charged for having on the previous day, he being in charge of Thomas Opie, suffering from smallpox, unlawfully exposed him, without proper precaution, in a public place, contrary to Section 126 of the Public Health Act, 1875. On Wednesday, the 19th ult., the R.T.B. Ketch arrived at Rolle's Quay, Barnstaple, with a cargo of manure, which had been discharged. The man Opie was unwell during the discharge of the cargo, and on the following Saturday he went to a medical man who, suspecting smallpox, sent him to Dr. Jackson, the medical officer of health. He saw him and sent him back to his vessel. From that time to yesterday he had been attended by Dr. Jackson and by Mr. Garland, the sanitary inspector, but had been specially looked after by a fellow seaman called Hilton, who was paid for it. The defendant had pretended that he had cut all connection with the ship and the owners, and, consequently, he a few days ago left the ship with his wife and child. But on Thursday he suddenly returned to the ship. Soon afterwards the patient was seen on deck, dressed, and the captain was heard to say to him, "Slip it ashore out of it, and go and tell the doctor that you have got no lodgings, and that he must find you some lodgings." The man then went ashore and walked along Rolle's Quay through a crowd of people. The defendant locked up the bunk where the patient had been sleeping, pulled the ladder on board, and then jumped ashore and followed the patient. Both of them went in over the drawbridge to Barnstaple. Eventually the patient was found in Boar-street, outside the house of Dr. Jackson. Mr. Garland then got him to go down to the old prison, which the Town Council were contemplating getting ready for an infectious diseases hospital. Bedding was provided, and the man Hilton engaged to look after him, and there the patient still was. The bench found the charge proved, and fined the defendant £5 and costs, or in default one month's imprisonment without hard labour.

At the Wakefield City Police Court, a prosecution arising out of the recent small-pox epidemic in the city was heard on the 26th ult. David Calvert, labourer, Johnston-street, was summoned at the instance of the Corporation for neglecting to notify to the medical officer of health for the city a case of small-pox which had arisen in his house. Dr. William Swift Wade, medical officer of health for the city, said that from information received he visited the defendant's house in Johnson-street, on the 3rd of March, and there found the son of the defendant (John William) suffering from small-pox. Witness had the patient removed to the infectious hospital, where he remained till the 19th of April. The case must have been of at least fourteen days' duration, the disease, as a matter of fact, having nearly gone. It was a very severe, confluent case, and he had never received any notice of it. The two houses were, he added, affected by small-pox. The defendant pleaded guilty to the charge, but urged in mitigation that every precaution had been taken, and none of the other members of the family had caught it. He was fined 5s. and 19s. costs.

At Ruabon Petty Sessions, on the 5th inst., two colliers, Daniel Phillips, Mountain-street, Rhos, and Joseph Davies, Bank-street, Rhos, were charged by Edward Davies, sanitary inspector to the Wrexham Rural Sanitary Authority with an offence against the Public Health Act. Phillips had his wife, and Davies had one of his children ill with small-pox. A magistrate's order for their removal to the infectious hospital was obtained, but had been disobeyed. Mr. A. Acton prosecuted, and the defendants' were each fined £1, including costs.

At the Ripley Petty Sessions, on the 8th inst., Michael Howard Murphy, travelling draper, of Mansfield, was summoned at the instance of the Heanor Local Board for having exposed himself in a public place while suffering from smallpox, at Heanor, on the 11th of March. Dr. Turton, medical officer of health, said that prior to the 11th of March the defendant had been staying at the Red Lion Inn, Heanor. On that date Dr. Turton received notice from Dr. Peters that there was a case of smallpox at the inn, and on going there he found that the defendant was suffering from the disease in an advanced stage. He told the defendant that he must go to the bedroom that he had slept in, and not leave it. He then left the house to see the sanitary inspector, and when they returned some time afterwards the defendant was gone. In fact, he did not return until 11 o'clock at night. Dr. Turton added that the disease had evidently been on the defendant for six or seven days when he saw him. Afterwards, on the 29th of March, he saw the defendant at the Mansfield Smallpox Hospital, where he identified him. Mr. Edward Clayton, sanitary inspector at Mansfield, said the defendant went to see him early on the morning of the 12th March. He saw that the defendant had got the smallpox very badly, and he, therefore, took him to the hospital, where he remained until he was convalescent.—The defendant made a long statement in defence, in which he said he did not know that he was suffering from smallpox. He was very ill, and while he thankfully acknowledged the great kindness shown to him at the inn, it was not likely that they wanted him in that condition. He, therefore, walked a greater portion of the way home in a half-delirious state, and how he managed to get home he could not think. On the way he must have dropped in a field, for when he awoke he found himself in one. He had Dr. Peters attend him when at Heanor, but he was never told that he had got smallpox. The doctor said to him, "I wish you were at home with your wife and family," and he, therefore, tried to get to Mansfield. As a result of the cold which he got, he had been compelled to stay in the hospital for weeks longer than he

would otherwise have done. And now he had received a bill for £12, which he had to pay for the cost of his maintenance in the hospital.—The Bench considered the case a bad one, and fined the defendant £2, and ordered him to pay £1 17s. 1d. costs.

In Edinburgh Sheriff Court, on the 5th inst., Sheriff-Substitute Hamilton closed the record in a case brought by the Suburban Committee of the Mid-Lothian County Council against Sir James R. Gibson Maitland, Bart., of Barnton, for a closing order in terms of the Housing of the Working-Classes Act, 1890. The County Council state that seven houses belonging to the defendant at Long Row, in the parish of Cramond, are in an insanitary condition, and the order was asked in respect of these. Objections were stated on behalf of defendant, in which it was denied that the houses were in an insanitary condition; while he also objects to the procedure followed by the County Council in seeking to obtain the order as not being in terms of the provisions of the Act. It was also stated that the tenants had been warned out at 28th May next. Mr. R. S. Rutherford, solicitor, appeared for the plaintiffs; and Mr. Milne, S.S.C., for the defendant.

At Coventry City Police-court, on the 8th inst., Mrs. Ann Reynolds, Little Park-street, was summoned in respect of a house, No. 3, in Court 9, Grey Friars'-lane, the Sanitary Authority, for whom the Town Clerk (Mr. Beard) appeared, asking for a closing order. The house comprised three rooms, with low ceilings, the bedrooms being reached by a step-ladder, and through ventilation was impossible. Two years ago proceedings had been instituted with respect to the same property, when the owner agreed to make this house and No. 54, Grey Friars'-lane, into one house, and had actually had a doorway constructed; but while the letter of the agreement had been kept, said Mr. Beard, the spirit of it had been grossly violated, as the door was kept locked and the places were separately tenanted.—A closing order was made by the Bench.

At the County Petty Sessions at Newport, Isle of Wight, on the 22nd ult., Mr. Edward Frederick Blake, solicitor, was summoned under the 103rd section of the Public Health Act 1875, for refusing to obey an order to enter and inspect the defendant's premises at Great Budbridge. Mr. F. Stratton, clerk to the Rural Sanitary Authority, said there were three separate nuisances at Great Budbridge which had been reported upon, and he called Mr. J. H. Cooker, sanitary inspector for the East Medene district, who said that he applied on the 10th December to inspect the premises, but was refused admission by the defendant's bailiff. He went again on the 18th January and was admitted by defendant, and found the drains defective. Certain work was ordered to be done, but when he went on the 10th of April to see if it had been done, he was refused admission. The defence was that the order had been complied with by the admission of the inspector the second time, and that the visit of the 10th of April had nothing to do with the matter. The bench, however, fined defendant 1s. and 17s. costs. Notice of appeal was given.

At the Greenock Sheriff Court, a few weeks ago, an action was raised at the instance of Mary M'Gilvray or Shaw, dairy-keeper, Gourcock, against Mr. Hayne, sanitary inspector, and Dr. Peacock, medical officer for that burgh, for £200 in name of damages for having entered her premises, and, it was alleged, ejected her therefrom, and destroyed milk, butter, &c., in stock, during a recent outbreak of smallpox, and when there was a case of smallpox next door. Sheriff Substitute Begg, after hearing evidence, held that plaintiff was a consenting party to the proceedings. His lordship assessed the damages for goods destroyed at £4, and the proportion of rent for the time the shop was closed at £2 12s. 9d., the sums which the defendants had been willing to pay, and gave decree for these amounts with expenses to the defendants. That decision was appealed against, and on the 2nd inst. Sheriff Cheyne issued an interlocutor, in which he recalled his Substitute's decision. He found that the inspector and doctor were in the same position as if they were acting under a warrant, and that consequently the plaintiff was entitled to full compensation for the stock destroyed, and for the loss sustained during the stoppage of her business for a period of eight weeks, and he thought £12 in all the circumstances would be regarded as full compensation, with expenses against the Local Authority. The only difficulty he had had in disposing of the case was the question as to full compensation, and he thought, in addition to the stock, £1 given for each of the eight weeks during which the key was retained by the Local Authority was sufficient.

At Partick Police Court, on May 15, before Bailie Strachan, at the instance of the Sanitary Inspector, William John Caskie, 8, Downhill-street, Partick, was charged with a contravention of the Public Health Act, by allowing William John, his son, to be exposed while suffering from scarlet fever. Mrs. Mull, Mrs. Birrell, and Jessie Sutherland, all residing at 8, Downhill-street, gave evidence to the effect that they had seen the child out of doors on various dates while apparently suffering from illness. Mr. A. L. M'Donald, assistant sanitary inspector, gave similar evidence. The magistrate found the charge proven. Although the penalty in such cases was £5, he would allow accused off with an admonition. He trusted other parents would see the necessity of keeping their children in the house while subjected to infection. It was most important to do so, otherwise infection would spread in the district.

On the 9th inst., the Tiverton Rural Sanitary Authority resolved to apply for a summons against the school managers of Thorverton for non-compliance with an order served last December to perform certain sanitary work. The sanitary inspector reported that work ordered to be done at the Boys' National School, Bradninch, had not received attention.

ON THE VENTILATION OF SEWERS & DRAINS.

By T. F. STRUTT, Chief Sanitary Inspector, Strand District Board of Works.

THE introduction of the water carriage system for the removal of excretal matter, has undoubtedly been a great benefit from a sanitary point of view, as by this means the faeces and house refuse are quickly removed from the house to the sewer. The great drawback, however, is the connection of the dwelling-house with an underground system of tubes in which foul gases generate, thereby rendering the interior of the house liable to be polluted by the escape of sewer gas. To obviate this, shafts were built from the crown of the sewer to the roadway for ventilation, but these being very few and far between, gullies in the channel of the roadway were connected direct to the sewer, thus forming auxiliaries to the ventilating shafts. House drains years ago, and even at the present day, in many instances, were connected direct with the sewer, with the rain-water pipes direct to the house drain, and the result, naturally enough, was that the sewer ventilators and gullies acted as inlets for air, and the numberless rain-water pipes of the London houses acted as the outlet. If the heads of the rain-water pipes were at a sufficient distance from the upper windows and the joints were good, very few complaints were made in those days of smells from sewer gratings. But within the last few years the cry has been raised to disconnect drains from the sewer, build inspection chambers, ventilate drains, &c.; and complicated systems of drainage have been introduced with the result that the upper air of London is poisoned by drain gas and the lower air of the streets by sewer gas. Such being the case, it is not to be wondered at that diphtheria makes great progress.

The disconnection is simple enough. An interceptor trap is generally fixed between the house and sewer which forms a barrier by means of its water seal between the house and sewer. With our army of sanitary inspectors, this process of improving (or otherwise) sanitation by the insertion of this trap has been steadily pursued, with the result that the gases in the sewer are daily becoming more and more bottled up, and the ventilators and street gullies very offensive, and yet no additional ventilators are provided. A remedy for this is required, and the remedy is simple—more air and more water are needed, a ventilating shaft is wanted every 10 yards, or better still (if it were practicable) a narrow open grating of the entire length of the sewer, and periodical flushing with water. Gases could not then generate, and the sewers would be almost as sweet as those provided for storm water.

The flushing of sewers should be carried out rigorously by local authorities, more especially at this period of unprecedented drought and threatened invasion of cholera. It has been clearly shewn by Dr. Acland, in his report on the cholera at Oxford, that epidemics generally follow droughts, and it is easy to connect the fact with the accumulation of sewage that takes place in the sewers. Under these circumstances, the first fall of rain simply stirs up the accumulation in its endeavour to wash away that which ought not to have been allowed to collect, and which could be got rid of by frequent flushing.

The sewers, therefore, in their present condition, are dangerous, and the means of polluting the air of the streets of London.

With regard to the house drain and the pollution of the upper air, we have seen that, by the insertion of the interceptor trap, the sewer gas is confined to the sewer; by the same rule the air of the drain would also be bottled up, and this has rendered it necessary to ventilate the pipes. For this purpose an air inlet (oftimes an outlet) pipe is inserted close to and on the house side of the interceptor trap, and an exhaust pipe is carried up from the highest and furthestmost point of the drain at the back of the premises, terminating above the parapet wall, and well away from any window or chimney stack. The idea is that the air enters the inlet, passes through the drain to the exhaust pipe, and thereby keeps up a constant current of fresh air through the drain, and that when the contents of the w.c. are discharged, the excretal matters are carried quickly through the drain to the sewer, and only a slight smell is caused during the passage, that escapes into the air above.

In some instances this may happen, but, alas! in the majority of cases the house drains are as bad as the sewers, especially where the position of the sewer does not allow sufficient fall to the drain, and the flush is only of the regulation 2 gallons. In these cases the solids remain behind to decompose, and the liquids run off. Again, the interceptor trap is not an unmixed blessing, it always impedes the flow of the house refuse, and in the cases mentioned above is an obstruction, the solids gradually settle at the bottom and quickly choke the drain, and frequently the cap of the clearing arm is found to be missing from its place, perhaps by an oversight on the builders part, or blown off by the pressure of the pent up gases of the sewer. The house drains then, in the majority of cases, are worse than the sewer into which they discharge, being simply elongated tubular cesspools, giving

off gases which are discharged by the upcast pipe into the atmosphere above. It will therefore be seen that under existing methods the air of London is being poisoned, 1st by house drains and 2nd by sewers. The remedies which should be applied to minimise the evil, are to improve the ventilation of the sewer as before mentioned, flush frequently, abolish the interceptor trap, and erect an upcast pipe to the back of each dwelling house from the highest point of the drains to a point above the highest window or parapet wall. Provided the traps of the house drains are good, and the joints of the pipe sound, there cannot possibly be any danger in these whilst their advantages are obvious.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

HUDDERSFIELD.

Dr. James Robert Kaye's report is a record of good work. The death rate during the quarter ending March was 18.27 per 1,000, as against 21.56 in the preceding quarter.

Dr. Kaye says:—

With regard to the notification of infectious diseases under our Local Acts, 127 cases have been reported as follows:—Small-pox 52, scarlet fever 81, diphtheria 7, enteric fever 10, chicken-pox 1, and 4 of a doubtful nature.

Of the 22 cases of small-pox, 13 occurred in January, 8 in February, and 1 in March. All of them were removed to the Birkby Hospital. Without entering into detail I repeat that these patients in themselves, and in their relationship to others, demonstrated to the hilt the efficacy of efficient vaccination and re-vaccination. Only in one of these cases did I feel satisfied that the vaccination in infancy had been properly performed, and none of them had been re-vaccinated before the attack.

The 81 cases of scarlet fever occurred throughout the Borough, but a small localised outbreak took place in the Marsh District. Lists of absentees from two schools were obtained and their houses visited, but with no evidence of concealed infectious disease.

Our work against infectious diseases included 422 visits to premises and 5 to schools, while 101 houses were disinfected by sulphurous fumes, and 3,568 articles by steam at Birkby.

The sanitary work of the department has been carried on in a most satisfactory manner, still the amount of work to be accomplished prevents as much systematic action with regard to bake-houses, milkshops, cowsheds, and workshops, as one would like. Several prosecutions against slaughtering in unlicensed premises, and exposing diseased meat for sale have taken place. In one case fines of £10, £5, and 10s. with costs were inflicted, but in another where the diseased meat had been sold, and passed out of the premises of the butcher, the prosecution failed because direct agency could not be established between the butcher and the man who delivered the meat to the pork and sausage maker. The delivery bill duly signed and made out, which was produced, was held to be not admissible in evidence. "The above case," says an editor, "shows how legal chicanery serves to screen from punishment persons who, either by design or by ignorance, prepare diseased meat for the use of their fellow creatures."

AGRICULTURAL IMPORTS.

Account shewing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended May 13th 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities	
		1892.	1893.
Animals living:	Number	11,453	5,117
Oxen, bulls, cows, and calves	"	717	—
Sheep and lambs	"	—	—
Swine	"	—	—
Fresh meat:—	Cwts.	48,730	35,670
Beef	"	49,155	7,683
Mutton	"	1,357	985
Pork	"	—	—
Salted or preserved meat:—	"	69,296	61,768
Bacon	"	6,404	3,154
Beef	"	21,557	23,773
Hams	"	3,033	2,385
Pork	"	3,674	4,785
Meat unenumerated, salted and fresh	"	8,856	18,477
Meat preserved, otherwise than by salting	"	—	—
Dairy produce and substitutes:—	"	39,589	41,987
Butter	"	25,574	21,802
Margarine	"	11,475	14,195
Cheese	"	11,965	10,884
Condensed milk	"	253,500	243,325
Eggs	Grt. Hndr.	3,155	3,889
Poultry and Game	Value £	503	262
Rabbits, dead (not tinned)	Cwts.	21,629	15,210
Lard	"	—	—
Corn, Grain, Meal and Flour:—	"	865,663	768,897
Wheat	"	308,707	335,632
Wheat Meal and Flour	"	54,706	280,571
Barley	"	345,583	338,526
Oats	"	34,866	42,993
Pease	"	110,724	116,616
Beans	"	480,562	615,238
Maize or Indian Corn	"	—	—
Fruit, Raw:—	Bush.	6,721	18,974
Apples	"	206,224	79,195
Oranges	"	444	45,217
Lemons	"	—	11,568
Cherries	"	—	60
Plums	"	—	—
Pears	"	23	—
Grapes	"	901	447
Unenumerated	"	3,351	8,820
Hops	Cwts.	495	1,759
Vegetables:—	"	—	—
Onions, raw	Bush.	92,504	808,166
Potatoes	Cwts.	29,533	72,206
Unenumerated	Value £	19,054	14,957

* Not separated in 1892.

Statistical Office, Custom House, London, May 15th, 1893. T. J. PITTAR.

FOOD AND SANITATION

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VOL. II. No. 42.

LONDON: SATURDAY, MAY 27, 1893.

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Food and Sanitation.

SATURDAY, MAY 27, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE VINEGAR IMPOSTURES.

THE Birmingham vinegar prosecution, reported in another column, once more shows how blind grocers can be to their own interests. Mr. William Kirby, grocer, Digbeth, was summoned for selling spurious vinegar. Instead of paying the fine, and in his turn prosecuting the manufacturer who caused him the summons, loss of time, and the discredit attached to the case, Mr. Kirby allows himself to be made a stalking horse for the purposes of the manufacturers of the spurious article, and, like the Welsh grocers in the alum baking powder case, will be hauled from court to court, badgered, bullied, and worried, and all for what?—only to bolster up a spurious trade—one of the many that have driven the grocery trade into its present cut-throat condition, that have brought English agriculture to its now ruinous state, and flooded the country with hungered labourers vainly seeking employment, filling the workhouses, and swelling the rates the grocer has to pay his increased share of. The Punch and Judy journalists, who supply the dreary drivel of the *Daily News*, the *Daily Telegraph*, and *Birmingham Daily Gazette*, have treated the public to some yards of twaddle on the case, like the following:—

"Twenty thousand workpeople will, it is said, be ruined if the law forbids their employers to go on manufacturing pyroligneous acid and calling it 'vinegar.' Nevertheless, the Birmingham police magistrates have taken upon themselves the responsibility of fining a shopkeeper, under the Food Adulteration Act, for selling the product under this name. For forty years, it is stated, the business has gone on of distilling acetic acid from wood for the purpose of selling it as vinegar, but the magistrates appear to have considered that this was decidedly too long."—*Daily News*, May 22nd.

Not to be outdone, the *Daily Telegraph* followed on the 23rd with a dose of "Telegraphese," from which we take the statement that "the manufacture of vinegar from wood is apparently not a thing of yesterday. It has been going on for some forty or fifty years, and upwards of twenty thousand persons are interested in its continuance, being directly engaged in the business." There is not one word of truth in the statements of either of these journals. The manufacture of vinegar from acetic acid is not forty years old; it is a thing of quite recent growth. When acetic acid was even £30 per ton, manufacturers found malt and grain cheaper, as it is better. It was only when acetic acid fell to about £20 per ton that its use for spurious vinegar-making began. Its price last week was £10 5s. Od. per ton, 40% strength. Again, as to the throwing of 20,000 persons out of

employment—we believe that it was Mr. Bell or Mr. Thomas Terrell who was responsible for this statement—but a more unwarranted and untrue one it would be hard to discover. The suppression of the manufacture of this bogus vinegar would not put 20,000 persons out of employment, but, on the contrary, would give work to thousands now idle through the substitution of acetic acid for the malt and grain still used by respectable makers. The truth of the matter is, that it is not the question of the employment of 20,000 persons for which the makers care one jot. They will, if Mr. Kirby be unwise, and allow them to make a tool of him, drag him from court to court to assist them in preserving the enormous profits they obtain by the manufacture of spurious vinegar in place of genuine vinegar. It is no difficult thing to show that this game is not only played at the expense of the grocers as a class, but against their real interests. Mr. F. Wolway, managing director of the City Vinegar Company, made an ingenious attempt to prove the opposite to this, and referred grandiloquently to the colossal plant, etc., at his works which would be ruined were the industry stopped. But Mr. Wolway had to admit that *he did not make* the 150 tons of acetic acid used in his business, and that his *colossal plant* was in truth “a plant,” being merely mixing vats and barrels which would be equally useful for genuine vinegar making as for the manufacture of the spurious article. But his evidence further contained admissions important for every practical grocer. He admitted a sale of 300,000 gallons yearly, and to purchasing for this purpose 100 to 150 tons of acetic acid of the pharmacopœia strength 33 per cent. The strength of the spurious vinegar is 4 to 4½ per cent., and the *colossal plant* consists of vats for putting from *six to eight parts of water to the acetic acid, and colouring it with caramel to imitate vinegar*. Even taking Mr. Wolway's estimate of the cost of his acetic acid at £17 per ton, which, as we have shown, is some pounds over the real cost, the total cost of the vinegar works out to the merest trifle over 2d. per gallon, for which Mr. Fincher said he paid 6½d. per gallon, whilst malt vinegar cost 7½d. *but both were sold to the public for 1s. 2d. per gallon*. According to our own calculations the profit to the maker of spurious vinegar is about *four hundred per cent*. Mr. Wolway shows it to be over three hundred per cent. If the grocer were making this profit we could understand his fighting appeals to quarter sessions, &c., but as he is not, he affords an excellent example of that trade blindness that has given over the grocery trade to cut-throat competition, and a bankruptcy list overtopping every trade in the country. But there is another aspect to this question which the *ignorami* of the *Daily News*, *Daily Telegraph*, and *Birmingham Daily Gazette* would do well to wash their brains and get the bearings of. If we had a Minister of Agriculture worth his salt, instead of a dullard who sleeps 361 days, and only awakes on the remaining four days to draw his salary, the effect of the acetic acid imposture upon agriculture would have been long ago seen and the fraud stopped. Within ten years English, Irish, and Scotch barley growing has decreased by 500,000 acres; the land has gone into permanent pasturage, and the labourers gone to make strikes and swell the starving army of unemployed—for, be it noted, that land under corn-crops requires *three times the amount of labour that is needed for land under permanent pasturage*. We are not surprised at the colossal effrontery of Mr. Thomas Terrell, if he be the same legal gentleman that was concerned with the suppression of the *Brigstocke v. Pearce* divorce case, but we are amazed at responsible daily papers allowing themselves to be humiliated into twaddle about “20,000 persons being ruined,” and the like, when the real facts of the case are that the suppression of this imposture would (if half the substance sold as vinegar be, as Mr. Wolway alleged, made from acetic acid) put thousands of extra workers into employment, and thousands more acres under barley crops. But this case like the scores of other frauds—the use of substitutes instead of malt and hops for brewing, the sale by swindling stores of American produce cut and branded to appear of English or Irish origin, the margarine impositions as butter, etc.,—is only a part of that system of fraud that is ruining agriculture, and driving labourers from the land, but of which our Minister of Agriculture apparently knows nothing, and cares less. As to the “expert” evidence for the defence of the wretched imposture vinegar, we would inform the *Birmingham Daily Gazette* that, with one exception, the gentlemen are as unknown as they are undistinguished in the paths of science. Mr. Taylor is not a Public Analyst for Torquay. Mr. Harry Grimshaw is not a Public Analyst for Manchester, and Mr. Wm. Johnstone is not a Public Analyst for St. Ives and King's Lynn. Mr. W. Johnstone is the exception; he is distinguished in the paths of science by the fact that he ceased, at the request of the members of the Chemical Society, to belong to that body. We very much doubt if the Public Analysts of Manchester, Torquay, St. Ives, and King's Lynn, would give evidence of the nature of that offered by the gentlemen who, according to the *Birmingham Daily Gazette*, let it be understood that they were the Analysts for those places.

SPURIOUS VINEGAR.

MR. W. JOHNSTONE, MR. HARRY GRIMSHAW, and MR. J. W. TAYLOR,
GIVE QUEER EVIDENCE.

AN APPEAL WILL BE MADE.

At the Birmingham Police-court on the 19th inst., before Messrs. Fisher, Ryland, and G. Tangye, and Dr. Warden—the adjourned cases against William Kirby, 69, Digbeth, Thomas M. Fincher, 37, Grange-road, and William Smart, 115, Moseley-road, for selling as vinegar a substance not of the nature and quality demanded, again came on for hearing. Mr. Bell (from the Town Clerk's office) appeared for the prosecution, and Mr. Thomas Terrell (London) and Mr. C. F. Vachell (instructed by Messrs. E. Jacques and Sons) appeared for defendants, Kirby and Fincher, and Mr. Cochrane represented Smart. Mr. Bell said that, as they had heard, the defendant Kirby was charged with having sold a substance not of the nature and quality of the substance demanded. The facts were that on the 13th ult. Mr. Davis, an inspector under the Food and Drugs Act, went to the shop of the defendant, who was a fried fish seller, and asked for half a pint of vinegar. He was served by the defendant's wife, and paid a penny for it. He told her it had been purchased for analysis, and offered to divide the sample into three parts, which she accepted. He left her one part, the other he submitted to Dr. Hill, whilst the third was in court. After he had told her it was for analysis, she said that she did not mind, as she had a letter from the firm that supplied the vinegar, saying that they would be responsible for any proceedings that might be taken against her for selling it. That was, he thought, an important fact. The case would turn upon first, how ought vinegar to be made, and on that point he submitted that it must be made from the fermented vegetable juice, and unless there was some special description given of vinegar, it must be made from malt or malted grain, in this country. And that in this country if one asked for vinegar one meant a vinegar which had been prepared from malt or malted grain, and that if one did not get that kind of vinegar he was not getting what he asked for, and was not being served with a substance of the nature and quality demanded. He submitted that vinegar was not merely acetic acid diluted, any more than wine was alcohol diluted with water. He would quote the description of vinegar given in the British Pharmacopœia. Mr. Terrell objected, and said that the notice of the prosecution was worded “did unlawfully sell to the prejudice of Thomas Davis a certain article of food.” The word drug was struck out, and therefore he contended that the British Pharmacopœia did not apply to food. It was an extensive industry that was threatened, and something like 20,000 persons were concerned, and would be ruined if the decision went against them. Mr. Fisher said that the Bench would allow Mr. Bell to go on. Mr. Bell then read the description from the “Pharmacopœia,” “that vinegar is an acid liquid prepared from a mixture of malted and unmalted grain by acetous fermentation.” He would also quote from “Watts' Inorganic Chemistry,” edited by Professor Tilden. Mr. Terrell took objection to the reading of this text-book, and the Bench upheld his objection. Mr. Bell went on to say that Dr. Hill had given a certificate stating that there was 70 per cent. of pyroligneous acid in the samples that had been submitted to him. He should call Dr. Hill to give some evidence to that effect, and should also call Mr. Hehner, an eminent chemist, who had devoted a great deal of attention to this special subject. After mentioning incidentally that the specific gravity of malt vinegar was 1·017 to 1·019, as compared with 1·007 of the article in dispute, Mr. Bell went on to say that the case was one of very great importance, because if the Bench decided that the vinegar, which could be made cheaper, could be sold as vinegar without telling the public it was simply made of pyroligneous acid, it would put an end to an industry in which more than 20,000 men were engaged. As the Bench had heard, this woman was to be indemnified by the firm, and therefore if they were satisfied to convict, he should ask the Bench to take that fact into consideration in fixing the fine.

Mr. Fisher said that it occurred to him that Mr. Bell might have said something with regard to the words as to the sale to the prejudice of the purchaser. That was no doubt one of the important points the Bench would have to direct their special attention to, and if he had anything to say they would like to hear it at this point.

Mr. Bell, in reply, urged that it was a much cheaper substance than malt vinegar, and if a man asked for vinegar he expected to get it. It was to the purchaser's prejudice if anything cheaper was sold. He also argued that the article in question did not contain those different elements which made vinegar the agreeable and dietetic article it was. It was simply acetic acid, and the purchaser got nothing more than dilute acetic acid. Mr. Bell then proceeded to call his witnesses.

Thomas Davis, the Food and Drugs Inspector, said that after he bought the vinegar from Mrs. Kirby, she said she did not sell it for malt vinegar. She added that the firm had told her not to sell it for malt vinegar, and they would be responsible for any consequences, and that she had a letter to that effect. Cross-examined, witness said that he asked for vinegar.—Dr. Hill, (medical officer of health for the City), said that he analysed the sample of vinegar numbered 295, and he gave the certificate that had been put in. He then explained the manufacture of vinegar, and said that vinegar was defined as an acidified product of an alcoholic liquid, which must be necessarily produced from some vegetable juices. In England vinegar was principally made from malt. So produced vinegar contained a number of other products, which if not present would prevent it being vinegar. There was a little alcohol, sugar, gum,

colouring matter, and certain salts, and, amongst other things, phosphorus. If this vinegar were distilled, and its acetic acid mixed with water, it would not be vinegar, because it would not have the proper qualities which were necessary, and which made it grateful to the smell and grateful to the digestion.—Mr. Fisher: Would this substance sold by the defendant be injurious? That depends upon whether the acid were purified. If it contained any tarry or creosotic products it would be injurious. Inasmuch as it is not a grateful article I think it is injurious. Mr. Carter (Magistrates' Clerk): What about this particular vinegar? Dr. Hill: It was never vinegar. It was simply acetic acid, and it was an artificial substitute, made of acetic acid, no doubt derived from the destructive distillation of wood. Instead of being fragrant and refreshing it had a disagreeable smell. Vinegar made from acetic acid would be much cheaper, inasmuch as it could be made quickly, whereas malt vinegar took some weeks to make. In cross-examination he said that he knew that the trade in pyroligneous acid had been carried on for the past forty or fifty years. Vinegar ought to be made either from wine, cider, or malt. Mr. Fisher: What would be the custom of the trade and the people connected with it if they asked for vinegar? Witness: Unquestionably, malt vinegar. Do you couple with the question of malt vinegar, vinegar made from malt and grain? A small quantity of malt and grain does better than malt. Mr. Hehner (analyst of Nottingham, Derbyshire, West Sussex, Derby and Ryde, past president of the Society of Public Analysts, and vice-president of the Institute of Chemistry), said that he had analysed the sample sent him by Dr. Hill, and found it was acetic acid, diluted and coloured brown with sugar. In cross-examination, Mr. Hehner said that he analysed the sample given to him by Dr. Hill, but he was not prepared to swear it was pyroligneous because he only had a very small quantity to analyse. He thought he could distinguish between pyroligneous acid and the sample of acetic acid submitted to him. Re-examined: These articles ought not to be sold as vinegar unless they were truly labelled, and the public were warned about them; but they were useful articles in their way. Mr. Fisher: If you asked for vinegar what would you expect? It would depend upon where I went. (Laughter.) If you took any ordinary shop—I don't define respectability—and asked for vinegar what would you expect to receive? Vinegar made of malt or grain, unless it was sold with a qualification. This concluded the case for the prosecution.

For the defence, Mr. Terrell said he hoped the Bench would very carefully consider the results of a decision hostile to the defendants before coming to such a conclusion, and should they come to a conclusion against him, he hoped they would grant him a case that the decision of the judges of the Queen's Bench might be obtained. The trade in pyroligneous acid was one which dated back forty or more years. It existed and was developed in South Wales, almost entirely on the sale of acetate of soda for the purpose of manufacturing vinegar. The wood was placed into retorts, was there distilled, and an acid, which was called pyrogigneous acid, came out of it. That was composed of tarry substance, and principally acetic acid, and the business of the distiller was to purify that acid for the purpose of bringing it into a proper state for the manufacture of vinegar. He treated it with lime and soda, and got acetate of soda, which he distilled with vitriol, and got pure acetic acid. He was going to contend that the sum and substance of vinegar was acetic acid. It was used solely because it contained acetic acid. It was not the peculiar flavour which was imparted to the article by reason of its being made from malt that people mostly desired, but what they wanted was acetic acid, and he thought the Bench would find there was no adulteration within the meaning of the Act. In the general term of vinegar was included all those forms of acetic acid. The total result was the same substance, chemically flavoured in a different way, and having slightly different properties, but entitled to be called vinegar. The vinegar in question answered all the purposes for which it was intended, and the struggle was simply to prevent its being sold as vinegar, and to encourage one industry at the expense of another industry. He then proceeded to call witnesses. Mr. W. Johnstone, who said that he had had eighteen years' practice at St. Ives and King's Lynn as public analyst, gave his definition of vinegar as a product of any saccharine matter or the destructive distillation of wood. Both were well known and well understood in business and science as being vinegar, and had been known as such for many years past.—Cross-examined: King's Lynn had a population of 18,000, and St. Ives of 3,000. He was not analyst there now.—Harry Grimshaw, twenty years an analyst in Manchester, said that vinegar was the dilute solution of acetic acid, more or less pure, and fit for human consumption. The extraneous substances were of no value except that of giving an aroma. He should prefer the vinegar at issue for pickling to malt vinegar. The acetic acid produced from wood was identical with acetic acid produced from anything else.—Mr. J. Taylor, analyst, of Torquay, gave evidence of a similar nature.—Thomas Milward Fincher, one of the defendants, a dry-salter, said he sold pure vinegar, which was made from acetic acid. He had also sold what they called malt vinegar. He charged the same price for acetic acid as he did for malt vinegar, but he paid a higher price for malt vinegar. He paid 6½d. per gallon for the vinegar made from acetic acid, and malt vinegar cost 7½d., and the price of both was 1s. 2d. per gallon.—Robert Jackson, grocer, of Carver-street, said that he had sold Messrs. Wolway's vinegar for some years, and it had always given satisfaction. He did not keep the malt vinegar.—William Draper, grocer, of 52, Arthur-street, also gave evidence to this effect.—Cross-examined, he said he did not know what it was made from until he came into the court.—Frederick Wolway, managing director of the City Vinegar Works, Bristol, said that the company and its pre-

decessors had carried on business for twenty-three years. He knew it had been the custom to make vinegar from acetic acid, and during that time a very large trade was done in this vinegar, in fact he should say half the vinegar sold in the country was made from acetic acid. The acetic acid cost £17 6s. to £17 10s. a ton, and it did not require very exhaustive plant to make the vinegar, which cost about 3d. a gallon. He had had brewed vinegar offered to him for 4½d. per gallon. If the manufacture of vinegar from acetic acid were stopped it would cause a very considerable loss to the country.

The magistrates retired to consider their decision. They were absent for a considerable time, and on returning said that they had considered the matter very carefully, and were of opinion it had been proved and admitted by the defendant, that the article the subject of the proceedings was a mechanical mixture. They were also of opinion that vinegar was the result of fermentation, and that the term did not apply to the mixture that had been sold in this case under that name. They therefore decided that the article was not of the nature, substance, and quality demanded, and were of opinion that it was sold to the prejudice of the purchaser. With regard to the certificate of Dr. Hill, they thought it was sufficient in law. It showed to the defendant a cause of complaint, and it had not been shown to the magistrates that it was untrue, or that it should have been more clearly expressed. Having regard to all the circumstances of the case in question, they thought the matter would be met by a fine of 20s. and costs, or in default an alternative of one month's imprisonment. This was in the case of Kirby. Mr. Terrell said there were two other prosecutions, and of course it was their intention to appeal to the quarter sessions. He would ask the Bench to stay proceedings until the decision of that Court could be taken. The cases were, therefore, adjourned, until the 28th of July.

ANALYTICAL PAPERS.—No. 1.

DR. BELL'S MILK ANALYSES.

We have on many occasions felt it to be our duty to use strong language, and this not in the complimentary sense, concerning the Somerset House milk analyses. We declared, that the analyses published by Dr. J. Bell, F.R.S., could not have been more incorrectly made in a country chemist's shop, instead of having the authority of the head of the Chemical Department of the Inland Revenue Laboratory, the referee in cases of dispute under the Sale of Food and Drugs Act, who, for his services to his country, has been made a C.B., and for his services to science a F.R.S. We have attacked the correctness of the milk analyses in question, as recorded in Dr. Bell's book on "The Chemistry of Foods," because we have abundant proof, and furnished the readers of this journal with such proof, that these analyses have been utilised by swindling milkmen to damage the pockets of the public to an incalculable extent, and have been so used as to make it almost impossible for honest and heavily burdened dairy farmers to keep their heads above water. We had thought that no further proof on our part was necessary of the absolute correctness of our allegations concerning the analyses in question, and we should have been glad to see them consigned to the storehouse of literary and scientific oddities and absurdities. But they are still so often quoted both in Courts of Law, by advocates of pump-handle and centrifugal milkmen, as authoritative and true figures, and are still perpetuated by self-constituted teachers of medical officers of health, that we think the time has come once more to refer to them, and to furnish proof that they are false, worthless, and misleading.

Much progress has been made of late years in our knowledge of accurate and scientific milk analysis, mainly by the aid of the admirable method introduced by a well known public analyst and skilful manipulator, Dr. M. A. Adams, past president of the Society of Public Analysts, and Medical Officer of Health for Maidstone, which method has since been improved and brought to perfection by various members of that Society. We now know, that probably not a single analysis published before Dr. Adams made known his process of milk analysis, is quite correct. This applies to all milk analyses, whether made in Somerset House, by public analysts, or by the highest continental authorities. It was proved that until the process of analysis in question had been introduced no chemist had been able to effect a complete extraction of the fat from milk, and that in consequence all figures setting forth the relative proportions of fatty and non-fatty solids, upon which figures the analyst has to rely when judging of the quality or purity of any given sample of milk, had not been correctly stated. In all cases the amount of fat had been under, and the proportion of solids not fat had been overstated. As soon as this was fully proved, chemists modified their previously held views, worked out the relation between the numbers obtained by the processes—and they were many—previously in use and those furnished by the Adams' method, in order to be able to compare their old and honestly done work, and correct its results in the light of the new knowledge. Thus, to state an instance, Dr. Vieth, than whom no chemist in England had an equal experience in milk analysis, took the immense trouble of recalculating thousands of milk analyses to bring them into line with modern knowledge,

and the Society of Public Analysts abandoned their previously used official method, at the same time readjusting their standards and limits, and recognising that the figures they had previously adhered to, of 2.5 per cent. of fat and 9 per cent. of solids not fat corresponded to 3 per cent. of fat and 8.5 per cent. of solids not fat when the Adams' method was employed. The apparent alteration in standard adopted by that Society was therefore solely a readjustment rendered necessary by the altered and improved method now at command.

It is no reproach to any really scientific worker if the progress of knowledge convinces him that previously held views and opinions have to be altered or modified. Only the fossil sticks to his errors and is satisfied with his ignorance, and there are fossils in science as well as in our State Departments.

We have said all this about the progress of knowledge in order to do full justice to Dr. Bell, and to prevent the impression that when we criticise his work, published before the Adams' process became known, we forgot the fact or any of its important bearings.

Many of the older processes of milk analysis, especially as regards the determination of the fat, although imperfect, yet yielded comparatively correct results, because when properly worked they gave results differing from the truth, as we now know it, by constant or fairly constant amounts. Thus, the process of fat extraction known as the plaster process, so called because the milk was mixed with plaster of Paris to subdivide the mass to be extracted by means of a fat solvent, always gives from 0.2 to 0.3 per cent. of fat less than the Adams' process, and by simply adding about 0.3 per cent. on to the fat yielded by the plaster process, and subtracting the same amount from the solids not fat, can readily be reduced to terms of the Adams' process. Even the old Wanklyn process as used by public analysts before the better process was introduced, is readily comparable with the latter, by adding 0.5 per cent. on to the fat, and subtracting 0.5 from the amount of the solids not fat. The figures thus amended may not be absolutely correct, but they are not wrong in any case to a greater extent than one or two tenths of a per cent.

It has been proved by abundant evidence, that the specific gravity of milk depends upon the relative amounts of fat and solids not fat. Fat is lighter than water, while the solids not fat, composed as they are of milk sugar, caseine with a little albumen and of mineral matters are much heavier than water. The specific gravity of milk sugar not differing very materially from that of caseine, and the latter standing in a definite relation to the amount of mineral matter found in milk, it follows, that the amount of fat and of solids not fat in milk being known, the specific gravity can be calculated fairly accurately, or *vice versa*, the specific gravity and the total solids being known, the proportion of fat and of the solids not fat can equally be calculated with a considerable amount of accuracy. Even before the exact Adams' process was known, this definite relation was known and utilised, a formula worked out by Mr. Hehner being used by many analysts, with results agreeing very closely with the actual figures found by chemical analysis, and affording a valuable check upon the correctness of the analysis. Of course, when the Adams' process came into use and it was known that it yielded higher percentages of fat than the Wanklyn process, the formula had also to be rectified, and one based upon a number of careful experiments was constructed by Messrs. Hehner and Richmond. This new formula has been tested by most public analysts, and has been unanimously pronounced to give results almost identical with those obtained by direct analysis. We are therefore now in a position to check any published analysis of milk, if the total solids and the specific gravity are stated. If the analysis does not substantially, that is within one or two tenths of a per cent., agree with the figures of the analysis, the analysis is incorrect. If there is a fairly constant difference between the calculated results and those yielded by analysis, then the method of analysis employed is inexact, but the results may be comparable with each other. If, on the other hand, there is no such fairly constant difference, then we know that either the method or the manipulator, or both, were at fault. Such results would be worthless and misleading.

The attentive reader who has followed this exposition can now intelligently examine the figures of milk analyses published by Dr. Bell. These comprise 224 analyses of milk taken from single cows, and 24 samples representing, or stated to represent, the mixed milk of herds of cows, in other words, dairy samples.

We have not taken the trouble to work through the whole of these 248 samples in the light of modern knowledge. We assume that the total solids and the specific gravities given by Dr. Bell are correctly estimated, because even the veriest tyro can readily make a fairly correct estimation of these items. In examining these results, we are bound to assume that *something* is correct, and it is but fair to assume that the determinations which admit of bungling only to the least reasonable extent, are free from error. Of course, if it be argued, that we have no right to make such a tolerant assumption when dealing with Somerset House analyses, we have no more to say and the series of analyses in question stands condemned and abandoned.

The following, then, is a list of Dr. Bell's analyses which we have re-calculated from the specific gravity and the total solids, using the formula given by Messrs. Hehner and Richmond:—

SAMPLES FROM SINGLE COWS.

Dr. Bell's		Recalculated.	Dr. Bell's		Recalculated.
Fat	Figures.		Fat	Figures.	
	5.44	6.69		6.20	7.40
	4.66	5.21		1.92	2.26
	4.79	5.17		4.55	5.86
	2.65	3.04		4.92	5.89
	2.58	4.18		4.69	5.80
	3.18	3.93		2.47	3.18
	4.88	4.83		3.23	4.19
	5.36	7.23		2.89	3.50
	3.38	3.80		4.25	5.81
	4.00	4.74		4.48	5.33
	3.11	3.39		4.50	5.45
	4.00	4.12		3.40	4.33
	6.22	6.39		2.62	3.38
	4.43	5.07		2.50	3.61
	2.47	2.90		2.69	4.15
	2.67	3.01		2.59	3.60
	2.71	3.27		2.51	3.68
	2.29	3.10		2.20	3.40
	3.23	4.05		2.52	3.40
	2.78	3.35		3.07	4.28
	2.31	3.03		3.99	5.71
	3.19	4.19		3.99	5.92
	2.83	3.32		3.81	4.96
	4.33	5.30		2.76	4.03

DAIRY SAMPLES.

Dr. Bell's			Dr. Bell's		
	Figures.	Recalculated.		Figures.	Recalculated.
Fat	5.14	5.70	Fat	3.28	4.06
	4.83	5.48		2.95	3.41
	3.21	3.37		3.58	4.87
	4.03	4.71		3.62	4.60
	3.38	3.80			

It will be seen from this selection made at random, that in some cases the difference between the real figures and those published by Dr. Bell is small and insignificant, while on others it is truly awful, *reaching two per cent.* In the majority of cases the difference is from one-half to seven-tenths of a per cent. The solids not fat are stated by Dr. Bell just as much too high as the fat is too low. There is no order or law running through this series of analysis, and to correct them by any broad and generally applicable deduction, is out of the question.

It cannot be alleged for Dr. Bell, that at the time he wrote his book and published his figures, he did not yet know that there was a definite relation between the figures yielded by analysis and the specific gravity, for on page 11 of vol. ii., he quotes Mr. Hehner's research on the subject. As, however, the chemical officials at Somerset House are self-sufficient, and could not stoop to learn anything from so low a creature as a Public Analyst, the research in question is dismissed by Dr. Bell in a faintly patronising manner, and without due understanding of its importance.

We trust that when in the future cases are defended, as the recent one in Scotland, in which a Public Analyst, figured so prominently on the side of the milk vendor, the lie direct may be given to such defenders. The table of analyses given above will enable this to be done effectually and definitely. It is time that rapt pupils of Somerset House be hoisted with their own petard.

ADULTERATION PROSECUTIONS.

MILK.

At Manchester, on the 17th inst., Mr. A. T. Rook, Superintendent of the Nuisance Department, prosecuted on behalf of the Corporation George Gill, milk dealer, and cowkeeper, 144, Ashton Old-road, Openshaw, who was charged with an offence on April 11th. Inspector Wheeldon on that date bought a pint of milk from Mrs. Gill, for which he paid 1½d. She told him it was from their own cows. The same day he purchased a second sample of milk from a different vessel, and this on analysis was found to be genuine. On the 13th April he again visited the shop, and asked if they would let him see the cows milked. When he was told that it was at his own option whether or not he allowed the Inspector to see the milking done, Mr. Gill said, "I say no!" Mr. Estcourt said his analysis of the milk purchased from Mr. Gill's shop showed that there was 9 per cent. of added water in it. Mr. Gill, in defence, said he did not know but that the milk was pure. He had to leave it to other people. Mr. Armitage: But you said "No" to the Inspector's request. You do take a little active part in the business. Mr. Gill: Sometimes, not always. Mr. Armitage: The Inspector asked you if you would allow him to take a sample of milk from the cows, and you said "No." Mr. Gill: No, he wanted to see the cows milked. Mr. Armitage: Why should he not? Mr. Gill: He said it was at my own option. I was giving him permission, but he did not. Mr. Armitage: But you finally

refused. Mr. Gill: No, certainly not. Mr. Armitage: If there was nothing to conceal why should you refuse the officer? Mr. Gill: I did not. I have to leave the milk business to other people. Mr. Fisher, after consultation with his colleagues, said they considered this a very bad case, and a fine of £10 and costs would be imposed.

William Riley, 126, Ashton Old-road, Openshaw, who was represented by his wife, and George Edge, of 6, Ashton Old-road, were concerned in the next case. On the morning of the 11th of April Inspector Wheeldon bought a pint of milk from Mrs. Riley at her shop, for which he paid 1½d. She stated that George Edge supplied them, and on the following morning Wheeldon bought a pint from Mr. Edge, as he was in the act of delivering a quantity from a dandy at Riley's shop. From what Edge told him, Wheeldon went to London-road Station on the 14th, and there took a sample from a can consigned to Mr. Edge by Mr. Potts, farmer, Mottram. Mr. Estcourt said that he had analysed the three samples. That sample taken from the can at the railway station was pure. Compared with it, the sample got from Mr. Edge contained 6 per cent. of added water, and the sample purchased from Mrs. Riley 8 per cent. of added water. In defence, Mrs. Riley said she sold the milk to the Inspector as the milkman served it to her. The latter had only just gone out of the shop when the inspector came in. Superintendent Rook said that in 1883, Edge, who was then living in Tipping-street, Ardwick, was fined 20s. and costs for selling milk with 16 per cent. of added water. In the case against Mr. Riley the quantity of water was so small that he would withdraw the summons. Mrs. Riley: Thank you, sir. Mr. Armitage: Mrs. Riley, try to get some kind of a guarantee in future. A fine of 40s. and costs was imposed on Mr. Edge.

At Liverpool, on the 20th inst., John Wrathall, milk dealer, Lower Breck-road, Anfield, was fined 20s. and costs—to include the Analyst's fee—for selling milk which had been adulterated. The Analyst's certificate showed that the milk had been deprived of one-third of its cream, and that from 3 to 4 per cent. of water had been added. Defendant said it was the product of the third milking. No cream had been taken away nor had any water been added.

At Folkestone, on the 17th, Mr. Pearson, Inspector, prosecuted Carlo Macstrani for selling milk with 15 per cent. added water. Fined 9s., costs 10s., and 21s. Analyst's fee.

Inspector Pearson also prosecuted Henry Philpot for selling milk adulterated with 16 per cent. of added water. Fined 10s. and 30s. costs. And Elizabeth Mason for milk which was adulterated with eight per cent. of water. The Bench fined the defendant 30s. and 33s. costs.

At Glasgow Sheriff Summary Court—before Sheriff Birnie—Alexander Cameron, dairyman, 17, Raeberry-street, pleaded not guilty to a charge of having, on 29th March, in Oakbank-street, sold from his cart a pennyworth of sweet milk, which, on analysis, was found to contain 16 per cent. of added skim milk. For the defence, Robert Nelson, the respondent's vanman, stated that while out with the van on the day in question he ran short of sweet milk, and put half-a-gallon of skim among the sweet milk to make up the deficiency. Cameron stated that what Nelson did was against his express instructions. He was exceedingly careful as to the quality of the milk he sold, and he tested it almost daily before he sent it out. The Sheriff found the charge proved, and imposed a penalty of £1.

Robert Nelson, the vanman, who also carries on business on his own account as a dairyman at 317, Garscube-road, admitted having on 29th March sold a pennyworth of sweet milk, which on analysis was found to contain 4 per cent. of added water, and was deficient of fat to the extent of 5 per cent. Respondent said he was not in the dairy all day. His Lordship imposed a fine of £2.

At West Bromwich on the 18th, Richard Hill, Walsall-street, was summoned for selling milk deficient of 34 per cent. of natural fat, on the 18th April. Defendant was fined 2s. 6d. and costs, amounting to £1 9s. in all.

Jane Ferguson, Auchenmead Farm, Kilwinning, pleaded guilty to having, on 5th April, sent skim milk to a Glasgow dairyman which contained 27 per cent. of added water, and also sent cream which contained 29 per cent. of added water. She was fined £4.

Robert Laidlaw, milk dealer, 390, Gallowgate, was fined 30s. for having on 29th March sold a pennyworth of sweet milk which contained 15 per cent. of added skim milk.

Robert Smith, Dairyman, 40, St. Clair-street, was convicted of having, on 29th March, in North Watson-street, sold a pennyworth of sweet milk which contained 28 per cent. of added skim milk, but, as he had an informal warranty from the wholesale dealer who supplied the milk, the fine was limited to 19s.

At West London Police-court on the 19th, Colin J. Smith, Kilburn-lane, was summoned by the Chelsea Vestry, for selling milk to the inspector which was found to have 80 per cent. of the original fat abstracted.—Fine £60s., with 12s. 6d. cost. The penalty was subsequently reduced to 20s., it being stated by a young man that he bought the business of Smith and made a mistake.

MARGARINE.

At Paisley Sheriff-court, before Sheriff Cowan, Simon McDonald, grocer, Main-street, Barrhead, was accused of having, on the 24th March, exposed a quantity of margarine in his shop without having the necessary label attached. A plea of not guilty was tendered. The evidence for the prosecution was that when Captain Harding,

chief constable, called at the shop he asked the assistant to be supplied with ½lb. of butter, pointing to a quantity lying on a shelf. The assistant, in supplying him with the article, remarked that it was margarine, and not butter. There were no labels in view, and the assistant had said he had not any. Corroborative evidence was given by Constable Cameron. For the defence it was alleged that there were margarine labels in the shop at the time, but were lying at the backshop while the premises were being cleaned and put in order. The Sheriff said he discarded the statements made for the defence as being exceedingly doubtful, but believed the evidence given by Captain Harding and the constable. He found the charge proved, and fined the accused 40s. and £2 2s. 6d. expenses or 14 days.

At Bristol Police Court on the 17th inst., Samuel Newman, grocer, West-street, Bedminster, appeared to a summons charging him with selling margarine without a label. The case was proved by Inspector Thomson. Fined 5s. and costs.

George Gilmour, provision merchant, 150, St. George's-road, pleaded not guilty, at Glasgow Sheriff Summary Court, to a charge of having on the 18th ult., exposed margarine for sale without a label. Mr. Gilmour and his shopman stated that when the Inspectors entered the shop the articles were just being taken out of the window in order that it might be cleaned, and the labels had been taken off and placed in a drawer. Sheriff Birnie said it was strange that the Inspectors always went into shops on the day when the windows were being cleaned. Mr. Lindsay said that the expenses in the case amounted to 32s. In milk cases the analyst's fee was only 7s. 6d., but in margarine cases it was £1 1s. The Sheriff imposed a fine of 35s.

At Liverpool, on the 20th inst., John Edwards, grocer, Morcambe" street, Anfield, was fined 20s. and costs—to include Analyst's fee—for having sold as butter half-a-pound of margarine. Mrs. Edwards asserted that she told the officer that it was margarine when he was purchasing the article.

CHEESE.

A case of considerable interest both to buyers and sellers of cheese came before Sheriff Birnie at Glasgow. William F. Rankin, provision merchant, 546, New City-road, was charged with having, on 22nd March, sold 1lb. of cheese which on analysis was found to contain 32 per cent. of fatty matter not derived from milk. Mr. A. D. Wylie, writer (of Messrs. M'Lay, Murray and Spens), appeared for the respondent, who pleaded guilty. Mr. John Lindsay, assistant clerk of police, prosecuted. Mr. Wylie said that two years ago two cases came before Sheriff Guthrie, in which a similar question was raised in connection with cheese manufactured in this country. It was then explained that the word "cheese" in Scotland was a generic term applicable to a variety of qualities containing various ingredients, that in recent years, with the view of improving what was sold in the market as skim milk cheese, some manufacturers added a certain amount of the best bullock beef fat, thereby producing an article of food which was more digestible and nutritious than cheese made only of skim milk. These cheese were sold at 6d. per lb., while full milk cheese were sold at 8d. to 10d. per lb. Sheriff Guthrie decided that there was no breach of the Food and Drugs Act, because buyers knew that they were not getting full milk cheese for 6d. per lb. The respondent in that case was therefore acquitted, and in a similar case which came before Sheriff Guthrie a little later a similar decision was given. Since then, however, a number of cases had been before the Courts in England with regard to this class of cheese, in which the Stipendiary Magistrates, and in one case the Recorder, while stating that the cheese contained a percentage of added bullock's fat, said that the cheese was a most nutritious article of food, but that a special label should be appended to it. He understood that the home manufacturers of that class of cheese now labelled it "Oleine cheese," in the same way as other cheese were called Gorgonzola, Stilton or Gruyere, some of which contained other than milk products. Considering that special labels were now being attached to this class of cheese, and in view of the decisions in the English Courts, it was not thought expedient or necessary to trouble the Court by fighting out the matter again. These remarks applied to cheese made in this country, in which they knew the exact constituents, but the cheese referred to in the complaint were American cheese. They were sold at 6d. per lb., a price at which the public were getting the very best possible value. The respondent bought the cheese in the belief that they contained only the ordinary milk products. On that class of cheese there was little or no profit, and in view of that fact, and also of the decision of Sheriff Guthrie, he asked his Lordship to impose no penalty in the case. Mr. Lindsey said that on the day this sample was taken, other seven samples of sixpenny cheese were bought in different shops in the city, and only two of them contained fatty matter not derived from milk. All the others were certified to be genuine. That showed that pure cheese could be sold at 6d. per lb. His Lordship adjourned the case in order that he might have a consultation with Sheriff Guthrie.

GIN.

On the 6th inst., at Askern, John Saul, Railway Hotel, Askern, was charged with having sold gin under proof on April 5th. Superintendent Blake said he visited the house and obtained a pint of gin for the purpose of analysis. It was found to contain 22 degrees excess of water.—The defendant said he did not dispute the statement. He had been ill, and consequently unable to attend to the business personally.—The Chairman said, under the circumstances, defendant would only be ordered to pay the costs.

UN SOUND MEAT PROSECUTIONS.

At Blacklion on the 15th, Mr. Gerard A. Bird, solicitor (for the Enniskillen Guardians), prosecuted Francis Kelly, of Drumshambo, for having exposed for sale in Blacklion market on Saturday, 11th March last, a quantity of unsound meat. Dr. Taite, Sanitary Inspector, proved the offence, and said he had ordered the meat to be destroyed. The defendant, who was formerly convicted, was fined £1 and 4s. 6d. costs.

Walter Johnson, of Shay Farm, Queensbury, near Bradford, was summoned by Inspector Wycherley, at Liverpool on the 17th, for exposing two pieces of beef which were unfit for human food in Bevington-hill slaughter-house. The defendant pleaded that he had sent the beef to Liverpool to be inspected, whereupon Mr. Stewart said he must not send his bad meat to Liverpool. He would have to pay a fine of £10 and costs.—Francis Jones, 110, West Derby-road, for exposing for sale a piece of mutton unfit for human food, was fined 10s. and costs. Inspector Luya proved the case, and Mr. Neale defended. The defence was that the meat had been placed in the shop by mistake by the boy.

EXPOSING BAD FISH.

James R. Swanson, 154, Vauxhall-road, was summoned by Inspector Bailey for exposing mackerel which was unfit for human food, and was fined 40s. and costs.

BUTTER ADULTERATION IN DUBLIN.

SIR CHAS. CAMERON'S ANALYSIS VINDICATED.

THE "INSOLENT" IRISH COUNSEL LAYS LOW.

WILL PROFESSOR TICHBORNE VERIFY HIS ANALYSIS?

Our contemporary, the *Irish Daily Independent*, May 19th, reports the next stage in the extraordinary case we chronicled in our issue of May 13th, as follows:—

THE CERTIFICATE FROM SOMERSET HOUSE.

In the Southern Division, before Mr. Swift, the case of the Corporation against Mr. Peter Murphy, South Great George's-street, came on for hearing. The prosecution had been brought for selling butter containing a mixture of margarine, and the case had been before the Court on the 20th of April. On that occasion Sir Charles Cameron deposed that the butter contained 20 per cent. of foreign fat. Professor Tichborne, for the defence, gave evidence which did not concur with Sir Charles' statement. The case had been then adjourned to enable a further analysis to be made by Somerset House. Mr. M'Inerney (instructed by Mr. M'Sheehy) appeared for the Corporation. Mr. Ennis, who appeared with Mr. O'Shaughnessy, Q.C., (instructed by Messrs. Ennis), represented Mr. Murphy. Mr. Ennis said in consequence of the absence of Mr. O'Shaughnessy he would ask for an adjournment. His Worship: What is the necessity for an adjournment?—Mr. Ennis said there were statements which Mr. O'Shaughnessy would like to make. Mr. M'Inerney said they had the certificate from Somerset House sustaining the opinion of Sir Charles Cameron.—His Worship: Yes fully. Mr. M'Inerney said the other side wanted details of the analysis. They made an application that Mr. Daly, Chief Clerk, should ask Somerset House for the particulars. Under the section of the Act of Parliament there was no authority to ask for particulars. They have no objection personally that particulars should be sent there, but they failed to understand what information it would convey. It would be merely a lot of figures.—His Worship: A lot of chimerical figures which I could not understand, as well as he knew. He understood the certificate. Mr. M'Inerney: Possibly these gentlemen from Somerset House might come over if they got their expenses paid, but under the section you cannot compel them to come. The certificate from Somerset House was signed by Mr. James Bell, D.Sc., F.R.S., C.B.; Mr. R. Bannister, F.I.C.; and Mr. G. W. Lewin, F.I.C. We have now analysis by two independent analysts, Mr. Otto Hehner, formerly President of the Public Analyst Society, Great Britain and Ireland; and Dr. Dyer, Secretary of the same Society.—Mr. Swift said he did not want any additional evidence. Mr. M'Inerney said it was the manner in which Sir Charles had been attacked that made him go to this trouble. Mr. Ennis said the certificate on the face of it was bald. It gave no particulars like what Sir Charles gave on the last occasion.—His Worship said there was nothing in the Act of Parliament to compel them to give particulars or adopt a certain form. He considered the motion for the adjournment reasonable, however. The case was accordingly adjourned till the first of June.

We do not understand why Mr. Swift adjourned the case, unless it was to give Mr. O'Shaughnessy, Q.C., an opportunity of apologising for his insolence, and Professor Tichborne an occasion for explaining how it happens that not only Somerset House chemists, but scientists like Sir Chas. Cameron, Mr. Otto Hehner, and Mr. Bernard Dyer find butter adulterated, which Professor Tichborne pronounced genuine. If Professor Tichborne be agreeable, he might, on the same occasion, explain the following testimonial to Coleman's Wincarnis, which our analysis showed contained but 0.087 of total nitrogen, but which Messrs. Coleman allege Professor Tichborne eulogised as follows:—

REPORT ON AN ANALYSIS OF COLEMAN'S LIEBIG'S EXTRACT OF MEAT AND MALT WINE,

By Charles R. C. Tichborne, LL.D., F.C.S., L.A.H.I., Fellow of the Institute of Chemistry; Lecturer on Chemistry, Carmichael College of Medicine; Chemist to the Apothecaries' Hall of Ireland; Analyst to the County of Longford, etc.

15, NORTH GREAT GEORGE'S-STREET, DUBLIN,
Date of Report, 13 Aug., 1888.

I have made a careful examination of Coleman's Liebig's Extract of Meat and Malt Wine, and I can certify that it is a preparation having the exact composition described by Messrs. Coleman & Co.'s advertisements; that is to say, it is a mixture of Port Wine, Liebig's Extract of Meat, and Malt Extract.

I can certify that it contains the above ingredients, including a considerable quantity of solid nitrogenous products of the same nature as found in Liebig's Extract of Meat.

It is extremely palatable, a very important point when we consider the special cases where this preparation is likely to be used.

Coleman's wine must be a powerful restorative, as it consists of a mild alcoholic stimulant, combined with the extracts representing a mixed diet of cereals and meat in a concentrated form.

I have no doubt that it will be found invaluable where such a diet is required in this concentrated form, and yet capable of easy assimilation.

(Signed) CHARLES R. C. TICHBORNE.

If Professor Tichborne has any explanation to give with respect to this and the butter case, our columns are at his disposal for a communication of reasonable length.

PUBLIC HEALTH NOTES.

Washington is vigorously prosecuting the fraudulent milk-seller. An excellent arrangement has been made for promptly proceeding against delinquents. Samples collected by inspectors of the Health Office are sent by the Chief Clerk, Mr. Tracy, direct to the city Analyst, Professor Hird. In the case of every sample found to be adulterated the result is sent to the city attorney, and an information at once made out against the seller of the stuff. According to the *Washington Evening Star* the latest novelty in the milk business, was the reported finding of a large fishing worm in milk purchased from a dairyman.

Bristol possesses one of the most curiously constituted sanitary authorities that the records of the Local Government Board have ever revealed. So little do the members of this uncommon body of sanitarians understand the elements of sanitation, that they can imagine no means of getting rid of the town's refuse other than by piling it up into huge heaps in the neighbourhood of closely built workmen's houses, and leaving it be blown about by every wind that rises. We called attention some weeks ago to the extraordinary action of the authority in creating an intolerable and dangerous nuisance of this kind in a place called Fox-lane. Now they have excelled that achievement by selecting a space set aside as a public recreation ground, in which was a disused quarry. The brilliant idea struck them that an easy way of getting rid of a few months' accumulations of the city's filth would be to fill up this quarry with it, and then to let the city's tired workers "recreate" on the top of it! The destructor is evidently an unknown engine to the Bristol Sanitary Authority. We recommend them to build one before the city becomes the centre of a pestilence.

Consumers of the East London Company's water must have a very full-flavoured commodity supplied to them, if we are to believe some correspondents of the *Standard*. According to these, the sewage of Hertford, Ware, Hoddesdon and Broxbourne successively is discharged upon the land adjacent to the river Lea, and in some cases, after deodorisation, into the river itself. It is impossible to imagine that any amount of filtration will purify water so contaminated. We should be glad to chronicle a decision of Parliament that every local authority should be made to dispose of its sewage by one of the many means suggested by science, and that it should be a penal offence to poison any of our brooks and rivers with sewage or refuse of any kind.

The river Brent is no better. The rector of Perivale, the Rev. Dr. Hughes, declares that it is now a stream of black sewage from which the stench is so powerful that he had to shut all his doors and windows. Surely a Legislature that professes to be solicitous about our food supplies, should prevent careless sanitary authorities from poisoning both air and water.

What, for instance, can be more stupid than the action of the Local Board at the Mumbles, near Swansea? The filth and the rubbish from the place is carted to the seashore, there tipped out and left to rot in the hot sun, until a high tide carries it away. This is being done whilst the Swansea Port Sanitary Authority is anxiously considering how to stop a possible epidemic of cholera. Their elaborate precautions are bound to fail, it seems to us, while such criminal recklessness exists on their borders.

THE SANITARY INSPECTORS' ASSOCIATION ANNUAL PROVINCIAL MEETING AT MAIDSTONE.

In Greece and Rome the office of Sanitary Inspector was one of the highest dignity—so high, indeed, that Epaminondas, renowned as the greatest military genius of his epoch—was proud, after long and glorious service against his country's enemies, of his election to the post of "telearch" or supervisor of the cleansing of the streets at Thebes. A time may arrive in the United Kingdom when the safeguarding of the public health will be regarded as the highest of duties, and he who reduces a death rate by even 1 per cent. be held worthy of honour. But that time is not yet, nor is it like to be as speedy as earnest men hope. Crying as is the need for sanitary organisation, for concise, understandable sanitary legislation, for a Ministry of Public Health, for a State endowed society for scientific research, for every County Council having its Chemical Officer as well as its Medical Officer, for making the appointments of Medical Officer, Sanitary Inspector or Food and Drugs Act Inspector of stable tenure, subject only to termination by the sanction of the Local Government Board and carrying with them adequate salaries; for assurance that the knowledge of sanitary work possessed by each holder of an office is thoroughly grounded and not "crammed," there is apparently no statesman in our land wishful of understanding the crying urgency of this question, neither is our Parliament willing to grapple with it. In London, spite of Medical Officer and Sanitary Inspector, the jerry builders, slum property owners and vendors of margarine at butter price, still, in the main, rule, and prevent the work of the protectors of public health being successful. With all our swagger we are, in the recognition of the honourable character of public health work, far behind the Greeks or Romans. Ancient Greece, be it noted, deemed it an honour that its representative great warrior should be "telearch," i.e., Sanitary Inspector. What would be the public surprise to-day were Lord Wolseley, Lord Roberts, and Sir Evelyn Wood seen directing the cleansing of Covent Garden Market and the disinfection of smallpox clothing, or Lord Randolph Churchill concerned with the suppression of the swindling milk and separated milk mixing at Paddington?

Sanitation, like philanthropy, has many excrescences in philanthropic deadheads like the Mansion House Council on the dwellings of the poor, log-rolling and "Kudos"-seeking "Stryvers" who will "rule" sanitation or "bust it," of all of which the earnest man should steer clear. The scant recognition public health questions have received is traceable directly to the absence of real organisation or of combined effort by sanitarians. The need for organisation and for systematic efforts in public health work is revealed to us in well-nigh every report of a Medical Officer, and in every day of the work of the Sanitary Inspector. The Hendon Rural Sanitary Authority and the Belfast Corporation are amongst our latest examples of this truth, and the revelations made public in the reports of Dr. Bruce Low and Dr. Whitaker are disgraceful to an age that has been called that of "sanitary progress," and to the kingdom that created modern sanitary science. We regard, therefore, the enthusiasm attending the reception of the members of the Sanitary Inspectors' Association at Maidstone, on Saturday last, on the occasion of their annual provincial meeting, as a hopeful sign, and honourable to the Mayor and Corporation who extended so cordial a welcome to the visitors. Much of the success of the proceedings was no doubt due to the fact, frankly dwelt upon by the Mayor of Maidstone, that in Medical Officer and Sanitary Inspector that town is exceptionally fortunate. The Maidstone Medical Officer, Mr. M. A. Adams, needs no introduction to our readers, because he has a reputation not only as a sanitarian, but as being in the very front rank of European chemists. His researches have not only been recognised by Public Analysts the world over, but have given an accuracy to milk analysis which, until he gave his discovery to science, was impossible; and the tribute of the Mayor, that Maidstone believed it possessed the best medical officer in England, is one every scientist will regard as a just one. The organisation and admirable provision made by the Town Council for the comfort of visitors fell within the province of the Sanitary Inspector of Maidstone, and reflects the greatest credit on the energy and foresight of Mr. W. Jackling, who well earned the heartfelt good wishes given him by his fellow members of the Sanitary Inspectors' Association.

THE RECEPTION.

The reception of the members of the Association took place at the Town Hall at half-past eleven o'clock, when the Mayor, as Chairman of the Sanitary Committee of the Local Board, was accompanied by the Vicar of Maidstone (Rev. Canon E. F. Dyke, M.A.), Mr. Alderman Ellis, chairman of the Drainage Committee; Councillors J. S. Anscomb, G. F. Baker, J. Barker, S. Britt, G. E. Wallis, Mr. S. L. Monckton (Deputy Town Clerk), Mr. Alexander (Chairman of the Association), Mr. S. C. Legg, Hon. Sec., Mr. M. A. Adams (Medical Officer of Health for the Borough), Mr. Walter G. Scoones (Borough Surveyor), Mr. William Jackling (Sanitary Inspector), &c. Among the company in the body of the hall were Messrs. A. H. Lukes (Gravesend), W. J. Coe (Faversham), J. S. Roper (Hollingbourne), and others, the majority being inspectors in the metropolitan and surrounding districts.

The Mayor, in welcoming the Association to the town, said it was his gratifying privilege to give them to the town of Maidstone, the county town of Kent, a most hearty welcome, and he sincerely hoped that their visit would not only prove a pleasurable but also a profitable one as being one society out of many agencies which existed at the present time for the purpose of improving the sanitary condition of the people. He regretted that their president (Dr. B. W. Richard-

son) was not able to be with them to-day, but as the cause of his absence was one that was pleasurable to himself and his family, they could congratulate him upon the happy event which was taking place, while they were condoling with themselves upon being deprived of his presence. Maidstone was a town of large commercial interest in the county of Kent; it also was surrounded by many objects and reminiscences of historic interest, and if he might be pardoned for saying so, he thought they stood in the vanguard of towns round about them in respect to its municipal government. They went into all matters connected with sanitation with great spirit; they had a most energetic Medical Officer of Health, and a very busy Sanitary Inspector. He could not say he was exactly like the busy bee, going from flower to flower, but he was very busy, and he did snuff out some odours not of the most pleasant kind (laughter and hear, hear); but as this was part of his duties, it all tended to the health and prosperity of the town (hear, hear). He was afraid that they would not have time to show them many of the "lions" of the place, but he hoped the weather would allow them to see what they could show them from a sanitary and municipal point of view, and that they would take away with them pleasant reminiscences of their visit, and that while they endeavoured to entertain them they would all get some information and profit from their mutual intercourse (loud applause).

His Worship then vacated the chair in favour of the Chairman (Mr. Alexander) of the Association, who commenced by expressing his regret at the absence of their distinguished President, because they would miss one of those great, stirring addresses with which Dr. Richardson had familiarised them in the past. He saw the doctor a few days back, and but for the wedding of his son taking place that day he would have been delighted to take the chair. Referring to the history and the purposes of the Association he said that in 1833 they first came into existence, in consequence, largely, of the report of the Commission appointed by the Government on the Housing of the Working Classes. It was uncontestedly shown in that report that sanitary inspection was nothing at all like it ought to be, and they (the members of the Association) took it to themselves as a reflection upon their order, whether just or unjust, and they felt it to be their bounden duty to alter the condition of things which was shown to exist, in the interests of the public health. Mr. Legge, their present Hon. Sec., headed the movement—(applause)—and called a meeting with the result that Mr. Edwin Chadwick, one of the first authorities on the subject of the day, became the first President of their Association. (Applause.) From that time onwards they had been a progressive body, until their organization had spread all over the kingdom (hear, hear). They had come to Maidstone that day hoping that they might spend a very pleasant day under the Mayor's auspices, and hoping to be instrumental somewhat in awakening interest in the minds of the Sanitary Inspectors of Kent, in the Association which it was to their interest to join, and also that the public might possibly become alive to the great value of sanitation and work accomplished by the Sanitary Inspectors (applause). It was no figure of speech to say that they were in the vanguard of all improvements in the preservation of the public health. They recognised the valuable help of the Medical Officers, but they were also confident that they (the Inspectors) were the men who went into the front of the evil conditions which existed and succeeded very largely to remove them (applause). He then called upon the reader of the first paper.

Dr. Adams gave an address on "The Past, Present, and Future Sanitary History of Maidstone," saying:—Mr. President, your worship and gentlemen. As I understand, the Association of Sanitary Inspectors make it a custom to assemble, at certain intervals, at various places, for pleasure and profit, for recreation of body, for enlargement of mind. On the present occasion the association has selected Maidstone for its place of rendezvous; and I am sure I may venture to say on behalf of the Sanitary Authority of this town and its staff, that the association is heartily welcome, and that anything we can do to promote the object of the visit shall be done with all our hearts (applause). As chief Sanitary Officer of the borough it is quite natural that I should be expected to furnish you with a kind of introduction to the day's programme. I have been requested to tell you something about the sanitary history of the borough, and as the time at my disposal for this purpose is very limited, this can be done only in the most concise manner. In the first place I shall describe to you the physical condition of the locality, and then I shall endeavour to give you a sketch of the sanitary history of Maidstone as regards the past, present, and what we may look forward to in the future. Maidstone is the chief commercial town of Kent; and Kent, along with Surrey to the north, and Sussex to the south, constitutes the south-eastern counties of England. This province comprises a distinct and somewhat remarkable geological district, known as the Wealden area, shaped something like my hand; it is [an oval dish-shaped space, having an elevated rim around it. The rim to the north is called the North Downs, and to the south the South Downs. The two are connected to the west by the Hog's Back. The North Downs terminate in the cliffs at Dover, the South Downs at Beachy Head. The dish-shaped space is drained by six rivers: three to the north, the Mole, Medway, and Stour; three to the south, the Arun, Ouse, and Rother. Of these the Medway is the chief, and Maidstone stands on its banks at the mouth of the gorge, where this river breaches the North Downs. Maidstone is land-locked, and surrounded by sheltering hills. The climate is consequently damp and mild as respects the atmosphere, although the rain-fall is under 27 inches per annum. The soil and sub-soil are gravel and sand, on a peculiar calcareous rock called Kentish rag, all of which are pervious to moisture, and

consequently the subsoil drainage is good. This rag stone, known geologically as the Hythe beds of the lower green-sand, yields an abundance of delicious water, as do also the chalk hills in the downs.

In the middle of the 16th century the population was 2,500, in the 17th it was 3,500, in the 18th 5,500, at the end of the 18th 8,000, in the middle of the 19th 21,000, and in 1891, 32,000.

The first authentic account of the town is by Leyland in 1538. He describes it as one long street, consisting of Week-street, Gabriel's-hill, and Stone-street. In Queen Elizabeth's time it comprised 294 houses, which we may take to mean from 2,000 to 2,500 people. The houses were greatly over-crowded, and the people were miserably poor. The Mayor and Jurats had great difficulty in finding employment for them, and occasionally the sick and aged had to be maintained out of the municipal funds. The better sort of houses were usually occupied jointly by several families. For example, a surgeon had the ground floor, a different family the next floor, and a tailor and his wife the top floor. To eke out an existence the poor kept pigs, which roamed about the streets of a day, *ad libitum*, living upon such garbage as they could pick up, and of a night sharing the dwellings, such as they were, in common with their masters. There was absolutely no provision for drainage or the disposal of excreta or house refuse. All these and other filthy matters were cast into deep, foul gutters that ran the length of the street; the shambles were in the middle of the High-street. As may be easily understood, this created a state of affairs so scandalous and so unsanitary that most violent outbreaks of epidemic disease arose. This led to the passing of a bye-law in 1592 imposing fines upon the owners of pigs found wandering in the streets, and in 1603 the pig-sty nuisance reached such a pitch that they were ordered to be removed. All this culminated in a fearful outbreak of the plague which lasted for 123 years, from 1544 to 1667, killing off one person to every nine of the population in the one year of 1666 alone. In some cases whole families were annihilated *en bloc* in the space of six days. The Mayor and Corporation were at their wits end what to do. No volunteer nurses could be found to tend the sick, some of whom died miserably in the streets. A bye-law was passed compelling the occupants of alms houses to receive the stricken in their houses under penalty of themselves being turned out of their homes. The County Prison was invaded, causing fearful havoc, the George Inn had to be temporarily used as a prison. Communication with London was suspended. Criers were sent round to stop the Michaelmas fair. Baptisms and marriages were postponed or performed at Loose or Otham. Watchmen were posted "to keep all suspicious persons from coming into the street." In the midst of all these horrors the two chief surgeons of the town died. The people were reduced to the extreme of distress. £20 was sent to the incumbent of All Saints by the Archbishop of Canterbury and acknowledged by the Mayor. After the plague had burnt itself out, eighty years passed without anything remarkable occurring. Then, in 1746, a fearful outbreak of small-pox began, and for twenty or more years devastated the town. Vestry meetings were held, and the churchwardens instructed to prosecute at the assizes certain persons supposed to be responsible for its presence and spread. In 1766, the Vestry engaged a surgeon from Essex to inoculate poor people at the workhouse, at the rate of 5s. 3d. each. The next serious epidemic was in 1783, when jail fever broke out in the county prisons in East-lane, attacking seventy prisoners, and killing fifteen within a few days.

MODERN TIMES.

At last, in the year 1791, the Corporation awoke to the disgraceful unsanitary state of the town, and obtained an Act of Parliament "for the widening, improving, regulating, paving, cleansing, and lighting the streets, removing encroachments, obstructions, nuisances, and annoyances, and the better supplying the town with water." Improvement Commissioners were appointed, £7,000 was raised and quickly spent, and by supplementary Acts, more and more money was raised and expended. In 1819 the powers of the three earlier Acts were greatly enlarged by a new Act, which, among other things, made provision for the introduction of gas. In 1844 the first railway connection was opened. In 1866 the Pavement Commissioners were superseded by the present sanitary authority, the Local Board. In 1875 a new sewerage scheme was adopted, and executed between the years 1875-80. Now we come to times in which we have borne a personal part. Succeeding to my office in 1878 whilst the practice of sanitary science was as yet in its infancy, I found Maidstone without system, method, statistics, or sanitary appliances, riddled with cesspools and polluted wells, abounding in overflowing refuse heaps, mudpaved alleys and dilapidated rookeries; unfettered license as respects the harbourage of pigs and poultry; with no provision for public scavenging so far as regards the collection of house refuse; without any means for the isolation of infectious disease or the disinfection of infected things; and worst of all, peopled by a community ignorant of sanitary matters, and stubbornly tenacious of the old-fashioned ways they had been born and brought up in. A severe outbreak of small-pox in 1881 gave me a welcome and splendid opportunity for bringing to public notice the necessity for reform in some of these matters. This outbreak found us without an isolation hospital, without nursing staff, without the means of disinfection, without ambulance for conveyance of the infected people or property. The only pretence for provision for isolation was four miserable four-roomed cottages, in charge of an old woman of the "Mrs. Gamp" order. These cottages formed part of a long row of similar cottages in a poor part of the town, in no way isolated or capable of isolation. These soon becoming full to overflowing of small-pox patients, further accommodation had to be

improvised. Tents were obtained and erected in a meadow in the outskirts of the town. Only by great exertion was it possible that these extemporised, inadequate, and totally unsuitable arrangements could be kept going in a way so as to avoid a public scandal, as the following episodes show: One Sunday a powerful bargeman, in his mania, created a perfect panic in the neighbourhood of Tufton-street by his vociferations and violence, where not only could his screams be heard, but also his every movement witnessed by the terrified neighbours, as he smashed the windows and demolished the furniture, assaulting the nurse with the fragments, and with fearful imprecations threatening devastation in every direction. In another instance a man in his fevered frenzy jumped out of a first-floor-window into the yard below, and all but escaped in ghastly disfigurement, clad in bed clothes into the town. At the tents one night a woman evaded the vigilance of the nurse, rushed out of the tent, raced round and round the field, the nurse after her. Another night a violent storm of wind arose, that threatened to overthrow the whole encampment, and never shall I forget the anxiety I suffered that night in the dread lest some paraffin lamp might upset, and set the whole thing in a blaze. All this led to strong representations on my part which resulted in the building of the Public Hospital for the isolation of infectious fevers, which was opened in 1883, complete with laundry, mortuary, and disinfection station. (Applause.) Since then many other improvements have been effected and we have kept fairly well to the front. And now with far better scavenging, far better inspection, demolished rookeries, well paved and lighted courts and alleys, greatly improved paving in the main streets, an augmented and pure water supply, armed with the Notification Act, the Infectious Diseases Prevention Act, and other modern sanitary statutes, our ancestors of even a generation back would hardly know the town for the same place (applause). And now, gentlemen, what is to be said for the future of sanitation? There is no need to indulge in prophecy. We have only to turn to a consideration of known facts for our answer. Before you hangs a diagram (referring to a diagram suspended in the room), that exhibits in a graphic form the enormous unnecessary loss of life that even in our present greatly improved condition still goes on. The space included within the boundaries of this diagram are, as you notice, sadly invaded by preventable causes of mortality. The vast incursion by zymotic disease—consumption—diseases of organs, and many other not specifically mentioned, represent so much territory in the hands of the enemy which it is our duty to endeavour to reclaim. Much in this way has already been accomplished in the past; rest assured, gentlemen, even more will be accomplished in the future (applause.)

Mr. Grigg proposed a vote of thanks to Mr. Adams for his paper. It was only those who were brought face to face with sanitary difficulties that could really appreciate the value of the paper. There were two points which struck him in the paper, and they were the ways of the criminal classes in years gone by and also the doctors. The prisoners on one occasion were taken to a public-house, which would be appreciated, he was sure, even now (laughter), while the doctors got 5s. 3d. for an inoculation. (Hear, hear.)

Mr. Henry Thomas (Bermondsey) seconded. He was pleased to see a clergyman there, for he thought Sanitary Officers, Doctors and Clergymen were co-workers. Sanitary Inspectors should not only find fault, but teach the people the remedy. They were all serving their Creator. The speaker referred to the successful stamping out of typhus fever in his own district, but still there were other diseases through immorality and drunkenness. In conclusion he said he hoped that London would soon be as healthy as Maidstone. (Applause.)

The resolution was carried unanimously.

Mr. Adams in reply, said there were other diagrams on the wall, which to save time he would let them read for themselves. He, however, referred to one which showed the rapid decrease of the death-rate during the past few years. This was the result of better sanitation.

Mr. Walter Scoones next read a paper touching more particularly on the work done in the Borough with regard to the roads and bridges, recreation grounds, allotments, and sewage works. He first gave in detail a number of interesting places the members would pass on their visit to the sewage tanks, the waterworks at Farleigh and Forstal, &c. He pointed out what were the local industries. The average cost of their roads in Maidstone for three years was £400 per mile. Mr. Scoones also referred at length to the successful way in which the sewage was disposed of, and in conclusion said any other information he could give the members he should only be too pleased to. (Applause.)

The Chairman asked what was done with regard to the irrigation of sewage.

Mr. Leeds proposed a vote of thanks to Mr. Scoones, and spoke in high terms of the paper.

Mr. McNaw seconded, and the vote was heartily accorded.

Mr. Scoones, in responding, said as to the irrigation of the sewage their difficulty was the want of more land.

A vote of thanks having been accorded the Mayor for the kind reception accorded the association,

Alderman Spencer, in reply, said it was due to Mr. Adams that their borough was in such a happy position; as regarded sanitary matters. He endorsed one of the previous speaker's remarks, that children should be educated in all sanitary work. They had a very large drainage system here, but their weak point was the want of inducing householders to properly flush the house connections (hear, hear). This had had their very serious attention, and he had not the slightest hesitation in saying that if they were to have an outbreak of cholera in the country, unless that state of things was

altered, Maidstone would suffer very materially, and they would have a recurrence of the state of things which Mr. Adams had alluded to in his paper. He spoke this publicly, hoping the Press would take cognisance of it, and that the inhabitants of the Boro' would at once do something in the desired direction.

A vote of thanks was also accorded the Chairman for presiding.

The Vicar of Maidstone, in response to a special call for a speech, rose amid loud applause. After expressing the pleasure it afforded him to be present, and how interested he had been in what had been said that morning, the rev. gentleman said he was struck with what Mr. Adams had said about the condition of the town in early days, and what he said in connection with the various outbreaks of disease which took place. He would not yield to anyone—not even the Medical Officer of Health—that anyone could possibly take a greater interest in the sanitary condition of the people with whom he was bound to work and for whom he could not help having a deep love than the clergyman of a town (hear, hear). He mixed with the people in all circumstances. Mr. Adams had alluded to the outbreak of small-pox in 1881. At that time he (the vicar) was in another parish where there was a similar outbreak. They made the best arrangements they could under the circumstances, and wards were set apart for the patients, but there was no arrangement for their receiving visits of the clergy. He (the Vicar) got permission to go himself—naturally one would wish to go—wards being set apart for the purpose. He was told that he went at his own risk. He knew that, but for a great many of those people to be taken away from home and to receive no comfort, and their friends not really to know how they were going on, seemed a very sad state of things indeed. All precautions were taken, and he went, at his own risk, for two hours, twice a week, with the patients, and then, after taking every precaution, he went and told their friends how they were getting on. (Applause). It was only one's duty, but no one knew of the gratitude with which those reports were received, and nothing could have more surely brought home the connection between a pastor and his people. (Hear, hear). He wanted them to see how true it was, as had been remarked, that the Clergy and the members of the Association were connected in their work. (Applause). Speaking of the desirability of teaching the laws of health in the day schools, the Vicar said it was already carried out in All Saints' School, where the composition exercises were made to consist of lectures on the laws of health. (Applause). On behalf of the clergy of the town he welcomed the Association very heartily, and he hoped that they might derive some pleasure and profit from their visit, and that by their pointing out any weak spot in their local arrangements they might be better able to cope with any visitation of the cholera that it might please Providence to appoint.

The meeting, which was of a most successful character throughout, was then concluded.

The party then proceeded in brakes to see the Maidstone Sewage Works.

Alderman Chas. Ellis, J.P., C.C., Chairman of the Drainage Committee, received the visitors, who were shown the screening, precipitating, pumping and pressing machinery and engines—all excellent of their kind, and reflecting the highest credit on the engineering skill of the makers, a Maidstone firm. A lunch was provided in a charming elevated spot, and ample justice was done to the hospitality of the Mayor and Corporation. The Pumping Station at Forstall was next visited, and the magnificent pumping engines and works described by the engineer, Mr. W. J. Ware, C.E., after which the original pumping station, reservoir, and filter beds at East Farleigh were inspected. Here the cordial hospitality of Alderman Ellis was again manifested, and after refreshments the visitors were grouped for souvenir photograph, taken by Mr. E. E. Hibling, photographer, Maidstone. The return drive through the lovely hop and fruit country had but one slight drawback—a smart shower commencing when the party neared Maidstone. The sightseeing done, the Mayor, Alfred Spencer, Esq., J.P., supported by Councillor Charles Ellis, Canon Dyke, vicar of Maidstone, Dr. Adams, Mr. Hugh Alexander (chairman), and Mr. Samuel C. Legg, secretary of the Sanitary Inspectors' Association, entertained the visitors to dinner. A social evening followed, songs being contributed by Mr. Scoones, Mr. Arthur, Mr. Milliner, and other gentlemen. The usual loyal and patriotic toasts were proposed and seconded in pithy speeches, including a notable manly one from Canon Dyke. Acknowledging the cordial toast of their healths, the Mayor and Alderman Ellis testified to the untiring energy of the Maidstone Sanitary Inspector, Mr. Jackling, to whom the Mayor said the pleasure, honour, and credit of the day's proceedings was due. After an announcement from Mr. Hugh Alexander that the Association would visit Glasgow on August 15th, and requesting members intending to visit the Glasgow meeting to communicate with the Hon. Secretary, Mr. Samuel C. Legg, 117, Powerscroft-road, London, N.E., the pleasant proceedings terminated.

BRISTOL.

At a quarterly meeting of the Bristol Municipal Council, last week, the report of Mr. F. W. Stoddart, public analyst, for the past three months, stated that the proportion of adulterated articles—nineteen in 119, or 16 per cent.—was higher than usual. Among the samples sent in were the following:—Pepper, four, all genuine; butter, four all genuine; vinegar, six, of which five were genuine and one fictitious—acetic acid; lard, two—one adulterated with 15 per cent. of beef stearine; baking powder, four—one genuine, one adulterated with 21·7 per cent. of alum, one adulterated with 25·4 per cent. of alum, and one containing 7·8 per cent. of alum. Samples of cheese, mustard, coffee, oatmeal, yeast, and margarine were all pronounced genuine.

PUBLIC HEALTH PROSECUTIONS.

An important question to householders was decided by Mr. Denman, at the South-western Police Court, London, on the 8th inst. There was a summons against the Vestry of St. Mary, Battersea, for refusing to remove from 17, Garfield-road, Lavender-hill, the residence of Mr. C. E. White, a quantity of house refuse. Mr. Wilcox, who supported the summons, mentioned that for some years the Vestry were in the habit of removing the dust by way of Wix's-lane, which ran at the rear of the houses in Garfield-road, carrying it through the houses. The question in dispute was whether the occupier could compel the Vestry to take the dust out by the back way, or was bound to have it removed through the living rooms of the house, thus endangering the health of the occupiers. Mr. W. W. Young, on behalf of the Vestry, pointed out that there were no conditions in the Act of Parliament. Mr. Denman, in giving his decision, said the Act imposed the duty of collecting the dust upon the Vestry, and they had a right to carry it out in their own way. He dismissed the summons, but refused an application for costs. Mrs. Marsh and Mrs. Brew, both residing in Garfield-road, were summoned by the Vestry for refusing to permit their dust being removed. These summonses were by consent adjourned.

At the Daventry Division Petty Sessions on the 3rd inst., George Mawby, London, was summoned for a breach of the Public Health Act at Crick. George Fulcher, inspector to the Rugby Rural Sanitary Authority, said the defendant was the owner of a cottage at Crick. Witness visited the house on December 10th, and found it in a dilapidated state, unfit for habitation, and dangerous. He asked for an order from the Bench to close the house. It was not occupied, but was dangerous, as over-hanging the footpath. The Clerk said the proceedings had been taken under a misconception. They could not give an order to close unoccupied premises when, as in this case, there was no allegation of danger to health. If there was any danger to passers by reason of over-hanging buildings the Highway Authority could deal with it. The application was dismissed, the complainant to pay the costs, including 12s. for the travelling expenses of the defendant.

At Bath Police Court on the 11th inst., Arthur Goodrop, of 44, Southgate-street, was summoned for, that he, being the occupier of premises in Wine-street on or about the 25th of March last, did suffer obstructive matter to be thrown or pass into a drain communicating with a sewer belonging to the Urban Sanitary Authority in Wine-street. The defendant was a butcher carrying on business in Southgate-street, and his premises ran back into Wine-street. At the back of the premises the defendant was in the habit of dressing pigs, which had been slaughtered elsewhere. From 7, Wine-street there was a drain communicating with the sewer; it had no connection with any other house. On the 25th of March, in consequence of complaints, the sanitary officers went to the house opposite 7, Wine-street, and there the cellar was found to be inundated with sewage water, showing that there was an obstruction at some point or other. There was a manhole opposite 7, Wine-street, and on investigation it was found that the drain from that house was blocked. Defendant said that all their pigs were dressed in the country, and the entrails were cleaned there. Every bit of refuse that might accumulate was taken away with the ashes every night to be used as manure on the farm at Combe Hay. There was a licensed slaughterhouse near his premises. The greasy water that was sent down the grating might have thrown off solids and thus helped to block the drain.

The Bench decided to convict, and fined defendant £3 and £2 2s. costs.—The defendant said he had done what he could to assist the Authority, and had not intentionally broken the law.—Mr. Cox: You should try and find a more scientific way of disposing of the greasy water.

At St. Augustine's Petty Sessions, on the 29th ult., Mr. J. E. Burch, Clerk to the Blean Rural Sanitary Authority, applied for an order to close twelve cottages known as Brickfield Cottages, situated at Hampton, Herne, on the ground that they were unfit for human habitation. Mr. Burch said summonses had been served on the owners, Messrs. Knight, Bevan and Company, 17, Leadenhall-street, London, and the agents, Messrs. Cooper and Wachter, Canterbury, but no replies had been received from either parties, and they were not represented there that day. Dr. Robinson, medical officer of health for the Blean Rural Sanitary Authority, deposed that the cottages were in a damp and dilapidated condition, and totally unfit for human habitation. The bricks were not fit for ordinary commerce, and there was no damp course. The joists were under the ground, and there was no ventilation whatever. The rain had beaten through the roof, and had accumulated under the floors, which were so rotted that the legs of the bedsteads had forced their way through. The rain also came through the walls. Some discussion took place between Mr. Burch and the magistrate's clerk (Mr. W. N. Wightwick) as to whether the ownership of the property had been proved, the latter contending that it had not. Eventually the case was adjourned for evidence to be produced on the matter.

At a Sheriff Court, at Linlithgow, on the 3rd inst., Thomas Black, East Main-street, Armadale, was, at the instance of the county sanitary inspector, brought before Acting Sheriff-Substitute Hog, charged with a contravention of the Police Public Health (Scotland) Act, 1867, in so far as, while suffering from scarlet fever, he travelled by train from Coatbridge to Armadale on the 22nd ult. Black pleaded guilty. The doctor, he said, informed him that he was suffering from scarlet fever. That being so, he thought he would be better cared for at home than in lodgings, and, not aware that he was doing any wrong, he proceeded by train to Armadale. The Sheriff

imposed a fine of 25s., including expenses, with the alternative of 14 days imprisonment.

At the West London Police Court, on the 9th inst., Mr. T. H. Belcher, of Wych-street, Strand, was summoned for not obeying a notice of the Fulham Vestry to remove nuisances at two houses in Fane-street. Mr. Denselow, clerk of the Vestry, appeared to support the summonses, and called Sanitary Inspector Jones, who stated that he last saw the premises that morning. The ceilings and walls had been cleansed, but the other part of the notice had not been complied with. The defendant said part of the requirements was impracticable. The Vestry wished him to raise the parlour floors, which could not be done without bringing him within the Building Act, which required the rooms to be seven feet in height between floor and ceiling. The Inspector contended that there was ample space to raise the floors. He measured the rooms and found them 7 feet 10 inches in height. Even if the floors were raised eight inches there would be sufficient space left. Mr. Haden Corser adjourned the summonses to see what could be done to comply with the notice.

The Rev. J. C. Strickland, of Christ Church Vicarage, Tunbridge Wells, was summoned in respect of a nuisance at a house in Epirus-road, Fulham. The defendant did not appear, but Sanitary Inspector Croucher said he had seen the Rev. Mr. Strickland, who consented to an order to carry out the works. Mr. Haden Corser made an order as prayed, with 10s. costs.

At the Lambeth Police Court on the 19th inst., Mr. J. H. Jones, of London-road, Southwark, owner of several houses in Becket-street, Camberwell, appeared in answer to several summonses taken out by Inspector Kerslake on behalf of the Camberwell Vestry, for neglecting to carry out the orders of the Vestry under the Public Health Act, 1891. Mr. Marsden, solicitor to the Vestry, said the defendant had treated the Vestry with the greatest indifference. Mr. Biron fined the defendant £10, and 24s. costs on the first summons, and 40s. and 2s. costs on each of the other ten, amounting to £32 4s. in all.

COPPER IN TINNED PEAS.

A WARNING TO GROCERS.

At Aberystwyth Petty Sessions, on May 10th, Alfred Noyes, grocer, Pier-street, was charged by Howell Evans, chief Constable, with having on the 21st April, unlawfully sold green peas as an article of food to the prejudice of prosecutor, adulterated by a solution of copper, contrary to sections 6 and 3 of the Food and Drugs Act, 1875.—Mr. W. P. Owen appeared on behalf of the defendant.—The Chief Constable, having stated that he first proceeded with the charge under section 6, said that on the 21st ultimo he went to the defendant's shop and asked for a tin of preserved green peas, with which he was supplied, and paid 8d. for. He told Mr. Noyes that he was going to take the contents to the public analyst, and wished to know whether or not he desired the contents divided. He replied in the affirmative, and it was divided into three parts, and put into three bottles, which were sealed and marked. He kept one and took it to the public analyst, who certified as follows:—"I am of opinion that the sample has been adulterated by the addition of a solution of copper. The sample contained 1·12 grains of copper per pound of peas. If, as is probable, the copper were added in the form of sulphate, 2·8 grains of that compound must have been added to the pound of peas." Dr. Snape, in the "observations," wrote:—"Peas are 'coppered' in order to impart to them a fine green colour. The addition of copper in any form and in even smaller quantity than found in the above sample of peas has on several occasions been ruled to constitute adulteration under the Food and Drugs Act.—The copper must have been added as it is not a normal constituent of peas."—Mr. Owen: How does he know that? He was to analyse and not to make observations of that sort.—The Clerk (Mr. Hugh Hughes): You are right there.—Mr. Owen submitted that according to the section, evidence must be adduced that the addition to the article was injurious to health, which had not been done. His client had in no way deceived the public.—The Chief Constable said he asked for the green peas and not for the copper.—Mr. Owen said that the objection he raised was only a preliminary one; and the Bench desiring the case should go on, Mr. Owen cross-examined the Chief Constable, who admitted that when he asked for the green peas, Mr. Noyes offered him a bottle. He, however, had already asked for tin and reiterated his requirement. He never had any suspicion, when purchasing the tin, that the peas were adulterated, but he had been informed that green peas in tins were adulterated. However, he had no suspicion with regard to Mr. Noyes. He had no particular reason for refusing the bottle. He refused the bottle for no earthly reason. He had never thought there was any more copper in the tin than in the bottle. He had given his opinion with regard to copper being injurious, but he was no expert, and they could take his opinion for what it was worth. He did not take two summonses out because of any doubts. He received a notice from Mr. Noyes stating that he did not know otherwise than that the peas were pure. He never went to the shop for the purpose of detecting copper in the tins. Green peas were not impure, and Mr. Noyes' conduct did not for a moment make witness believe he was deceiving him.—The Chief Constable desired to call the analyst, but Mr. Owen said he did not want him called, but if Dr. Snape would take it from him, it was not right and proper for him to make observations as he had done.—Dr. Lloyd Snape said he could only bear out his certificate,

and, if he might be permitted, he would say that Mr. Owen had no right to make the remarks he had.—Mr. Owen said that he did not for a moment wish to compare his knowledge with Dr. Snape's, but he believed that he knew a little more law than Dr. Snape did. Addressing the Bench for the defence, Mr. Owen contended that the Chief Constable must have known that he was purchasing an inferior article, and, at the same time, he had a suspicion in his mind that there was copper adulterated with it, consequently there was no sale to the prejudice of the purchaser. He asked the Bench to assume that, because the Chief Constable, for reasons best known to himself, actually refused to accept what was pure, and took what was adulterated. As soon as Mr. Noyes heard of the adulteration, he wrote to Messrs. Cunningham, a wholesale firm, from whom he got the articles, about it, they having guaranteed that the tins were free from adulteration.—The letters were read by Mr. Owen, and Dr. Snape smiled, when Mr. Owen objected most strongly to his conduct, and characterised it as not being that of a gentleman.—The Mayor presumed Dr. Snape was perfectly at liberty to smile if he wished.—Mr. Owen said that it was not the conduct of a gentleman.—Mr. Noyes was then called, and said that he bought the tins of green peas from Messrs. Cunningham, a wholesale house, and they represented them as being of the nature and quality asked for—pure. The Chief Constable bought them in the same condition as when he (Mr. Noyes) bought them, and he was not aware there was any adulteration.—In cross-examination by the Chief Constable, the defendant said it was not usual to have a written guarantee, and he did not know that Section 25 required it.—Mr. Owen remarked that the guarantee was printed on the tin.—The Court was cleared, and, upon re-admission, the Mayor said that the Bench were of opinion that the case had been proved in one way, because the peas had been transferred to the public through the medium of Mr. Noyes; but at the same time they believed Mr. Noyes was as innocent that there was anything wrong as they (the Bench) were. They could inflict a heavy fine, but in that case they would only inflict a fine of 5s., with costs. They hoped that would be the means of the public becoming aware of the matter. They wished it to be clearly understood that they considered that Mr. Noyes was as free from suspicion or blame as any of the Bench were, but the Bench were bound to do their duty by dealing with the persons before them.—Mr. Owen said that the remarks of the Bench were very proper ones to make, and Mr. Noyes had come there to vindicate his own character.—The Chief Constable then applied for permission to withdraw the charge under Section 3; and the Bench agreed.

CORRESPONDENCE.

To the EDITORS of FOOD AND SANITATION.

VALENTINE'S MEAT-JUICE.

SIR,—Will you allow me to correct a slight error in your article on Valentine's Meat-Juice, which I have but lately seen? It is not quite correct to say that the attendant physicians ordered it for the late Mr. James Maybrick. Dr. Humphreys ordered it at a pretty early stage of his illness. It made him sick, and Mrs. Maybrick discontinued it, of which course Dr. Humphreys at his next visit approved. At the subsequent consultation, Dr. Humphreys and Dr. Carter recommended Neaves's Food. But Nurse Gore imagined that Mrs. Maybrick had tampered with the bottle of Neaves's Food, and instead of giving it to the patient, sent it off for analysis to the doctors, who found that her suspicions were groundless. Having thus disposed of the Neaves's Food, either Nurse Gore or Mr. Edwin Maybrick resolved to administer Valentine's Meat-Juice, which the doctors had not ordered, and against which Mrs. Maybrick protested. I may add that there was a bottle of brandy in the room which Nurse Gore also suspected Mrs. Maybrick of tampering with, and, therefore, sent off to the doctors for analysis, instead of giving it to the patient. It was also found to be harmless. But Mr. Maybrick got neither the food nor the stimulant which he required.—Truly yours,

OBSEVER.

To the EDITORS of FOOD AND SANITATION.

SOMERSET HOUSE CERTIFICATES.

SIR,—Mr. Scott-Elder hardly grasps the real point in this matter. As I take it, if the Somerset House chemists give a certificate to the justices that differs from that of the Public Analyst, the justices accept the Somerset House certificate as being of higher authority than that of the Public Analyst, and the habit now is to dismiss such cases, and a doubt is accordingly thrown upon the capacity of the Public Analyst. Your journal has given ample proofs that this procedure is unfair to the Public Analyst, and detrimental to the public. Mr. Scott-Elder admits that the Somerset House certificate is only an opinion, and clearly by the Act it is not evidence. In the public interest it is very necessary that where justices, influenced by a Somerset House certificate, reject the certificate of the Public Analyst, and are about to dismiss cases, Inspectors should ask for an adjournment and the attendance of the Somerset House chemists, and the Public Analysts to prove the accuracy of their certificates. It is only thus that justice can be really done, and such a course is necessary for the full protection of all concerned.

Yours truly,
INSPECTOR.

DR. NANSEN HAS ORDERED "FRAME FOOD" JELLY, ETC., FOR HIS NORTH POLE EXPEDITION!

Dr. NANSEN writes—(February 11th, 1893)—"I have now carefully examined the 'Frame Food' Jelly and Stamina Tablets, and think they are very good. We shall, of course, use a great deal of the Jelly. I would give the men as much as 20 grammes each man each day. This makes a great quantity for 12 men in 2,000 days. Please send 1,200 lbs. Jelly, 200 lbs. Extract, and 300 lbs. Stamina Tablets."

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Is a Cooked Food strengthened with the
"FRAME FOOD" EXTRACT of WHEAT PHOSPHATES, and therefore the
MOST NUTRITIOUS FOOD in the WORLD.

For **INFANTS** ; Developing Bones, Muscles, Teeth, Brain.
 For **INVALIDS** ; Restorative and Invigorating.
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 Increases Vigour, Restores Strength.

$\frac{1}{2}$ -lb. Sample in handsome enamelled Tin sent free on receipt of 3d. to cover postage.

Sold by Grocers, Chemists, &c., in Tins, 1 lb. at 1s., 4 lbs. at 3s. 9d., or sent carriage paid by F. F. Co.



Is made of the
"FRAME FOOD" EXTRACT of WHEAT PHOSPHATES and PURE CANE SUGAR, and is therefore
MOST NOURISHING; it is **DELICIOUS** eaten as jam on bread and butter, an excellent substitute for **MALT EXTRACT**, being **CHEAPER, NICER**, and more **NOURISHING**.

"Frame Food" Jelly costs 7d. per lb., Malt Extract costs 3s.

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"FRAME FOOD" STAMINA TABLETS { INVALUABLE FOR TRAVELLERS, CYCLISTS, ATHLETES, and for all who require a temporary substitute for a regular meal. Sold by Chemists, Grocers, &c., in 6d. and 1s. Boxes, or sent carriage paid by

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IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

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WHITE VEGETABLE—A purely Vegetable Preparation.

DESICCATED SOUP—TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

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Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

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1s. 6d., 2s. 6d., and 1lb. 7s. 6d. Bottles.

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A DELICIOUS MOUTH WASH.

Editor of *Health* says:—"An elegant and agreeable Toothwash, most effectual for strengthening the gums in case of tenderness, and ridding the mouth of the aroma of tobacco."

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Food and Sanitation.

SATURDAY, JUNE 3, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

ERRATA.

WE regret that by a slip of the pen, Mr. W. Johnstone, was stated in our last issue to have ceased, at the request of the members of the Chemical Society, to belong to that body. We should have stated that at the request of the members of the Society of Public Analysts, he ceased to be a member, and that the Institute of Chemistry removed his name from their register.

DR. CAMERON'S BILL & COFFEE MIXTURES.

It is three months since we pointed out to grocers how dangerously their interests would be affected were Dr. Cameron's Bill to become law. We showed how impossible it would be for the grocer to mix in accurate percentages, coffee and chicory, as Dr. Cameron, M.P., Mr. J. C. Frye, M.P., Mr. Kearley, M.P., Mr. Channing, M.P., Dr. Farquharson, M.P., and the Grocers' Federation would compel the grocer to do, and that any percentage over or under the exact quantities specified would entail prosecution. The unjust, stupidly drafted measure, might any time during the past seven weeks have passed its second reading, were it not for our exposures of its dangerous pitfalls. The benefit of our action is shown by the fact that even that most sleepy paper, *The Grocer*, on May 6th, publishes a letter from a Mr. John Williams, Didsbury, saying:—

"One very important question is the proposed alteration in the Food and Drugs Act—*re* sale of mixed coffee. I am sure grocers have not realised the position they will be in if the proposal is carried into effect: and why our Federation Committee have agreed to the proposal is a complete mystery to the writer." Mr. Williams says:—"How impossible it is to be perfectly certain, when you have thrown half and half (say) of chicory and coffee together, to find just half and half in any portion you weigh out of the mixture."

"There is another aspect of this matter, as affecting retail grocers, which so far I have not seen mentioned. Do grocers realise the fact

that if this proposal became law it would be necessary to keep a separate printed paper for each quality of mixture sold? Everyone knows how troublesome it is now to see that proper papers are used for pure coffee and mixtures; but if we take the average small grocer even, we find that under the proposed arrangement he would require four separate kinds of wrappers, and if doing a low-class trade, this would mean, taking one-ounce papers to eight-ounce—sixteen different printings! Truly this would encourage the sale of coffee with a vengeance! and I commend this aspect of the case to the consideration of the gentlemen who at the meeting advocated the new arrangement in the interests of the coffee growers.

"The fact is, the arrangement would kill the coffee trade entirely. In place of using a high-class coffee to blend with chicory, every grocer would be interested in proving that he gave a higher percentage of coffee in his mixture than his neighbour, and a low grade of coffee would necessarily be used to effect the purpose. It would then be good-bye to the coffee trade, except by those who purvey only a high class, and, as compared with tea, a very dear article to those who use coffee as a luxury."

Commenting on this the *Grocer* says:—

"It is certainly not desirable that retailers should be hampered by additional complications in regard to this article, and if they are to label each particular mixture with the percentage of ingredients it contains, the result is likely to be this: they will very soon only sell one mixture, or none at all. In these matters traders are obliged to depend upon their assistants to some extent, and when the latter are careless in the performance of their work, carrying out their instructions perfunctorily, or perhaps neglecting them altogether, it is hard that their employers should be called upon to pay the penalty. With a variety of coffee-mixture labels to deal with constantly—putting on each one in its proper place according to the proportion of amalgamation—assistants might easily make a mistake, and the consequence would be that their employer would suffer. The Coffee Trade Section of the London Chamber of Commerce have considered this matter, and have passed the following resolution:—"That this section of the London Chamber of Commerce hesitates to support the proposal to make a declaration of proportions of coffee and chicory compulsory, on account of the difficulty of proving what proportion of each substance a given mixture contains, and also that the proportions themselves are no guarantee of the value of the mixture." We commend this resolution to the careful attention of Dr. Cameron and those who are supporting him, since it is important that he and they should know clearly what are the practical opinions of the trade. If Dr. Cameron's desire be to promote the consumption of pure coffee, he is not going the right way to work. His measure is half-hearted. Why does he not go further, on the lines suggested by Mr. Williams, and propose that coffee and chicory be sold separately, so that those who want the former article in its purity may be satisfied? We do not say that such a proposal would please the majority of a grocer's customers, who know clearly what they want; and whatever they may ask for, they often want a mixture."

We suppose in another three months our other objections to Dr. Cameron's Bill will be understood and endorsed by grocers journals. But what an insult to the intelligence of grocers and a danger to their interests, lies in the ignorance, or worse, of their so-called trade papers? Truly they justify their condemnation as manufacturers' shameful prints, written in the interests of the grocers enemies—the adulterating manufacturers.

Meanwhile our exposures are doing good. At the last meeting of the Middlesborough Grocers' Association, Councillor Burrows moved that the Association protest against Dr. Cameron's coffee clauses. Mr. Weighell seconded the motion, and it was carried unanimously.

THE Glasgow Health Committee have again had under consideration Dr. Cameron's "Free Fraud" bill, and report that, having received a deputation of grocers with reference to Dr. Cameron's bill to amend the Food and Drugs Act, they recommended (1) that the Commissioners, with the view of protecting the interests of the consumers, adhere to the position already assumed by them in regard to the proposed alteration of section 25 of the 1875 Act—popularly known as the warranty clause—but that the committee would be prepared to consider any improvement in the clause in the Amendment Bill giving effect to the suggestions of the deputation by removing any hardship in the execution of that clause against retailers, and at the same time protecting the interests of the public; (2) that the Commissioners withdraw their opposition to clause 3 of the bill, which deals with the sale of margarine, and proposes to provide that it shall be a good defence to prove that the sale thereof was made in conformity with the provisions of the Margarine Act, 1887; and (3) that the Commissioners adhere to the position taken up by them regarding the other clauses in the proposed bill.

The St. Olave Board of Works condemned the bill at their last meeting. Mr. Shand moved that the board agree with the recommendation of the Works and Finance Committee, that the Board disapprove of the Sale of Food and Drugs Act (1875) Amendment Bill, as tending to hinder rather than help the prosecution of offenders under the Acts, and the motion was adopted.

After these condemnations of his *fiasco*, would it not be better for Dr. Cameron to leave subjects, of which he has no knowledge, alone?

PRACTICAL PAPERS FOR GROCERS.—No. 2.

THE SALE OF CONDENSED "SKIM MILK" IS AN OFFENCE UNDER THE SALE OF FOOD AND DRUGS ACT.

At the Guildhall, Westminster, on May 27th, a decision of the gravest importance to grocers and the public was given—the sale of Condensed Skim Milk being declared an offence under the Food and Drugs Acts. The case was another illustration of the truth we have so often impressed upon grocers, that they are being hoodwinked right and left, suffer loss of business, repute, and valuable time, and allow themselves to be dragged from court to court to fight this or the other appeal—not for their own benefit, but solely to shield some manufacturer anxious to pursue a business dangerous to the public, and malignantly injurious to the grocer. What, for example, could be more damaging to the grocer than to place him before the public in our law courts as a defender of what medical men have times over denounced as a dangerous fraud, close akin to child murder? Yet this is what the makers of skimmed condensed milk preparations are seeking day by day to do.

The decision that declared the sale of condensed skim milk illegal, was given at the Sessions House, Westminster, by Mr. R. D. M. Littler, Q.C., C.B., the Chairman of the Middlesex Quarter Sessions, in an appeal against a conviction of the Brentford Magistrates.—The evidence showed that Inspector Tyler, one of the officers of the Middlesex County Court, in January last, bought a tin of condensed milk from Alfred Platt, grocer, of Ealing, for which he paid 3½d. Upon analysis it turned out that 80 per cent. of the fat had been abstracted, and a close examination of the tin revealed the fact that it was called condensed skimmed milk. After the cream had been taken out by a separator, 35 per cent. of cane sugar was added. The contention of Mr. Bodkin was that no notice of the abstraction was given to Tyler until the purchase was completed, and even if there had been, he submitted that no intimation short of saying "This is skimmed milk, from which 80 per cent. of cream has been abstracted," was sufficient. It appeared, said Mr. Littler, that in each case the milk was sold in a tin bearing upon it a label with a statement that the contents were made of "skimmed milk," but these words were not on the most prominent part of the label, or in letters as large as some of the other words upon it. The expert evidence showed that the milk was not "skimmed" in a literal sense, but the fat was abstracted by mechanical process, leaving a substance which was wholesome and nourishing but much less so than milk. Mr. Littler said the Court was of opinion that the words "skimmed milk" were not printed in such a way or on such a part of the label as to give the notice of the nature of the contents required by the statute. There was in neither case an intent to defraud in the ordinary meaning of the words, but that was not necessary to create an offence against the statute. The appeals would therefore be dismissed with costs. Having regard, however, to the fact that the expenses of these appeals must have been great, and that, no case exactly like this having been decided before, the appellants probably thought that the label was a sufficient protection, the penalty would be commuted, in the case of Platt, to 20s. *But it must not be thought that the Court considered these as trivial offences. In future they would be punished more severely.* The label allowed under Section 8 of the Food and Drugs Act would not cover this, which was a prosecution under Section 9.

Lest Mr. Littler's reference to skimmed milk be open to misconstruction, we would mention that by skimming only 50 to 60 per cent. of the cream can be abstracted, but in this case 80 per cent. of the cream was abstracted, so that however bad condensed "skim milk" may be, condensed "separated" milk is even worse.

In the case of Frederick Wright, a grocer, of Brentford, who was fined £3 and costs, for selling condensed milk from which 50 per cent. of fat had been extracted, the appeal was also dismissed, the fine being altered to 10s. with costs.

Other convictions for the sale of such milk have taken place at the West London Police-court, on March 28rd, 1893, when Catharine Russell was fined £5 and costs for selling a tin of milk from which 90 per cent. of the fat had been abstracted, but which bore the notice, "skimmed condensed milk." Thomas Goden was fined £5 and costs for a similar offence. In many other courts cases were held over pending this appeal to Westminster Quarter Sessions, which was taken as the test case. It cannot be said that the whole question was not considered to the fullest possible extent, or that the verdict was a "snatched" one, for Mr. Littler, Q.C., one of the most eminent members of the English bar, and his fellow magistrates, took two months to decide the question.

The only scientific evidence adduced for the defence of condensed skimmed milk was that of Professor Attfield, who is not a medical man, and consequently his opinion "that skimmed milk with sugar added was very nutritious and good, especially for weak stomachs," was naturally treated as of no value. Neither is Professor Attfield a public analyst, and why he should claim to be an expert upon questions outside his province or knowledge

we do not know. Lest grocers should be led astray by such opinions as that of Professor Attfield, or be duped into being stalking-horses for manufacturers in other directions, we will give in a clear form the objections to condensed skimmed milk. The fatal objection is, that condensed skimmed milk is largely used for feeding infants, and that its use for this purpose has been condemned by well-nigh every medical man of eminence in England, Ireland, Scotland and Wales. Sir Andrew Clark, Sir Dyce Duckworth, and Mr. Jonathan Hutchinson, are amongst the many thousands of medical men who have done so. Against such a universal medical condemnation, the assertion of Professor Attfield is an altogether untenable one. This condemnation has likewise been supported by *The British Medical Journal*, *The Hospital*, and other representative medical papers. As long ago as January 28th, we exposed the defence of skimmed milk to be nonsense of the poorest kind.

For example, if we take an ordinary milk containing fat, 4 per cent., milk sugar 4·4 per cent., and casein 3·5 per cent., the abstraction of the fat, it is true, increases the casein, but only to an infinitesimal extent; whilst the heat-forming properties have been decreased by 4 per cent. It is thoroughly well known that food without fat will not of itself do to sustain life. Peas, for example, are highly nitrogenous, but they are universally eaten with fatty matter, otherwise they would be well nigh indigestible. Children—and it must be remembered that these separated condensed milks are largely used for feeding infants—cannot live without fat in their food. Of all fats butter is the most easily digested. To prove this, were a person to swallow 4 ounces of olive oil—one of the very best oils—the result would be to cause diarrhoea, but the same amount of butter fat may be eaten in pastry or otherwise with no ill effect whatever, but rather with benefit. This is even more true with cream where the particles of fat globules are very small, and can be readily attacked by the gastric juices. Therefore, to remove the fat from milk, and especially from milk for infants' diet, is to take away the most valuable and digestible constituent. The casein, which is the nutritive property remaining, is by no means easy to digest, and is especially difficult to digest in separated milk. It digests much more rapidly when mixed with fat and other food constituents, but infants cannot take such other food constituents. The specious argument advanced that the cane sugar added to condensed separated milk takes the place of the fat abstracted, is untrue. The excessive amount of sugar necessitates very large dilution of the condensed milk with water, before the milk becomes sufficiently palatable to enable a baby to take it.

Assuming that it takes three pounds of the separated milk to make one pound of the condensed milk, the total amount of casein present in a one pound tin would be 11 to 12 per cent. This diluted until palatable, necessitates the addition usually of from seven to ten times its bulk of water, which brings the amount of casein down to a little over one per cent. In plain words, *the baby is sucking little better than water.* This shows in glaring light the folly of the statements attributed to Prof. Brown and Prof. Attfield, and how dangerous condensed milks, from which nearly all the fat has been abstracted, are when used for feeding infants. Of these spurious milks the Local Government Board Report states that the Analyst for Battersea reports:—"The two samples reported as adulterated were certified to have had at least 90 per cent. and at least 60 per cent. of the fat abstracted respectively. These substances were sold in tins, which bore labels setting forth their good quality, their special fitness for infants and household use, and stating that they were free from all additions except cane sugar, a portion only of the cream having been removed. The directions given on these labels for diluting the product with water would, if followed, result in producing exceedingly weak sugary liquids of very little value. To use such preparations in the manner directed as the sole food for infants, would undoubtedly be seriously injurious to their health."

A pure condensed milk should contain 10 to 12 per cent. of fat (cream); but seven-tenths of the substances sold as condensed milk do not contain more than 1·54 to 2·72 per cent. of fat, being made from milk from which the fat has been separated by the centrifugal separator. They are, therefore, not condensed milk, but mere concoctions of skimmed milk, thickened with sugar, possessing no feeding properties worth mentioning.

Amongst the very poor, mothers who go out to work usually put their children out to nurse, and a pound tin of condensed milk is regarded as a week's food supply, and furnished for that purpose by the mother. The alarmingly high rate of infant mortality that has puzzled our scientists to find its cause, is to a great degree here accounted for. Infants fed on such trash are literally starved to death. It has been calculated that a pound tin of the highest class condensed milk, containing twelve per cent. of fat, only affords nourishment for two to three days for a healthy infant. The horrible process of starvation to which a baby is subjected who has to drag out a week's existence on the rubbish that contains only one to two per cent. of nourishment may well be imagined; and to permit the sale of

these fraudulent substances as it is at present carried on is to connive at child murder. No doubt it was this consideration that caused Mr. Littler to so emphatically state, "that it must not be thought the Court considered the offences as trivial ones, and that in future they would be punished more severely."

The decision at Westminster is one, therefore, of the very gravest importance to grocers, who will serve their own interests best by turning a deaf ear to the wiles of manufacturers, and refusing to deal in any but full cream condensed milks. Prosecutions not only entail loss of time and annoyance, but they bring disrepute and loss of business, and it concerns every grocer who has the honour of his trade at heart, to free it from cut-throat, dangerous, cheap-and-nasty competition, and jealously guard its good repute. Grocers make more profit and run no risk by selling pure articles, and the possibility of a Coroner's verdict of "death by skimmed" or "separated" milk starvation, ought to weigh with the trade, and lead them to resist inducements to sell any save genuine guaranteed full cream milk.

ADULTERATION PROSECUTIONS. MILK.

At West Hartlepool, on May 17, John White, farmer, of Seaton Carew, was charged with selling milk containing a deficiency of natural fat. Mr. S. Stroker defended. Mr. T. Wheat, Sanitary Inspector, proved the case, and handed in a certificate from Mr. Stock, Public Analyst, which showed that the milk was deficient in natural fat to the extent of 9.7. For the defence, Mr. Stroker said the milk had been analysed by a Mr. Wilson, of Stockton, who was of opinion that the milk was "sophisticated." Of course, the Bench would be aware that cows at times gave an abnormal quantity of milk. There had been no rain, and the animals had been fed on artificial food. Defendant had been in the milk trade nearly all his life, and that was the first time that any complaint had been made with regard to the milk he sold, and it had passed the analysis of the authorities frequently. Dr. Gourley, the magistrate, stated that it was clear there had been an addition to the milk, and that there was a deficiency of cream. Such was not what the public wanted to buy, and defendant would be fined 40s. and costs.

William Buck, milk-dealer, of Richard-street, was also charged with selling milk containing too much water. The case was proved by Mr. Wheat, who handed in a certificate showing that the milk contained 5 per cent. of added water. A fine of 40s. and costs was imposed.

At Liverpool, on the 17th ult., Owen Pritchard, 188, Orrell-road, Kirkdale, was summoned for selling milk which had been adulterated with 6 per cent. of water. 20s. and 15s. costs. Mary Howard, 67, Hawkestone-street, was summoned on two informations for selling milk which had been adulterated in one case with 21 per cent. of water. As defendant had been fined on a previous occasion, his worship imposed a fine of £5 and costs in the first case and £1 and costs in the second. Catherine Parry, 17, Rutland-street, and Richard Sedgwick, 33, Reynolds-street, were each mulcted in a penalty of 40s. and costs for selling adulterated milk. A fine of 20s. and costs was imposed on William Finney, 15, Sleeper's-hill, who was summoned for selling milk which was afterwards found to be adulterated. James Andrews, 86a, Lambeth-road, was fined £10 and costs for selling adulterated milk. This defendant had been several times previously convicted. A summons was heard against John Aspinall, 6, Goring-street, for a like offence. Mr. Neale defended, and a fine of 20s. and costs was imposed. Ellen Haygarth, of 430, Mill-street, was fined 40s. and costs, and Thomas Lawson, 132, Copperas-hill, who had been previously convicted, was fined £5 and costs. Inspector Webster proved the last three cases, and Inspector Baker the others.

At Bristol Police-court, on the 17th ult., Arthur Bishop, York-road, Montpelier, was summoned for selling milk containing 20 per cent. of added water. Inspector Fletcher proved the case, and handed in the Public Analyst's certificate. Supt. Cann then stated that the defendant was fined in 1890 and 1891 for the adulteration of milk. A fine of £5 and costs was imposed.

Chas. Ham, of Barrow-lane, St. Philip's, was summoned for selling milk adulterated to the extent of 10 per cent. Inspector White having given evidence, a fine of 5s. and costs was inflicted.

On the 17th ult., the Borough magistrates at Huddersfield, fined William Wrigley, milk dealer, Linthwaite, 10s. and costs for having sold milk adulterated with eight per cent. of added water on the 26th ult.

George Walker, milk dealer, South Crosland, was fined a similar sum for having sold milk to which 5 per cent. of water had been added on the same date. In each case the milk had been purchased by Sanitary Inspectors of the Borough for analysis.

At Thames Police-court, on the 18th ult., Sarah Harris, 73, Northey-street, Limehouse, was summoned for selling milk adulterated with twenty per cent. of water. Mr. George Hay Young prosecuted, and said 4d. a quart was paid for the milk. Defendant kept a small general shop. Mrs. Harris said she sold the milk as she received it. Mr. Dickinson fined her 20s. and 27s. costs. —Jenkin Morgan, 72, Three Colt-street, Limehouse, was summoned for selling milk with forty per cent. of its cream abstracted. Mr. Young said the case was a very bad one. Defendant, who kept three shops, extensively advertised that his milk was well suited for infants and invalids; but he probably considered the inspector was neither the one nor the other. Mr. Dickinson ordered defendant to pay a fine of £10 and 27s. costs.

At Coventry Police-court, on the 18th ult., William Rieby, milk seller, Smithford-street, was summoned for selling milk adulterated with 12 per cent. of water. Fined £5 and costs, and the analyst's fee. —George Benjamin Tew, farmer, Harnall-lane, was summoned for selling milk from which 30 per cent. of the fat had been abstracted. Mr. Beard, (Town Clerk) prosecuted, and Mr. Masser, for the defendant, submitted that there was no absolute evidence that William Berry, from whom the milk was purchased, was in Tew's employ. The Bench convicted the defendant, fining him £5 and costs, and the analyst's fee. —Alexander Stokes, 67, Much Park-street, was similarly summoned in respect of milk from which 18 per cent. of cream had been abstracted. Defendant said the milk was sold in the same condition as he bought it, but he had no warranty. The Bench inflicted a fine of £1 and expenses.

PROTECTED BY A CARD.

At Portsmouth on the 12th ult., Alfred Pharoah, of 65, Church-path, was charged with selling a pint of milk from which 32 per cent. of the cream had been abstracted. Mr. G. H. King prosecuted. Questioned by the defendant, Inspector Turner stated that he saw a card inside the shop on which was written a notice to the effect that milk which was sold at 4d. a quart was guaranteed pure, and to contain all the cream, while milk sold at 3d. a quart was second-class milk, and the quantity of cream contained was not guaranteed. The Bench said that the card was open to serious objection, as the latter part of the notice was in smaller letters, but the case was dismissed.

Simon Stafford, of 52, Albert-grove, Southsea, dairyman, was charged on the information of Wm. H. Taylor, Inspector of the Urban Sanitary Authority, with selling a pint of milk, from which 70 per cent. of cream had been abstracted, Mr. G. H. King prosecuted. Defendant had a card in his window, "New milk, 3d. per quart." The Bench said that it was a shame that the poor should be swindled in such a manner. It was a very bad case. Defendant, who has been previously convicted of a similar offence, was fined £5, including costs. In default, one month's imprisonment.

At the Stratford Petty Sessions, on the 20th ult., J. Taylor, a dairyman, of 3, Wadeley-road, Leytonstone, was summoned by Captain Kittoe, an Inspector under the Food and Drugs Acts, for selling adulterated milk. On April 20th a sample of defendant's milk was bought, and on a sample of it being analysed, it was found to be adulterated with 28 per cent. of added water. Defendant at first pleaded not guilty, but afterwards admitted the offence, and was fined 40s. and 6s. 6d. costs.

At Liverpool, on the 24th ult., John Benson, Osborne-grove, was fined 40s. and costs for selling milk which was adulterated with water. —Thomas Harker, milk dealer, Cowe-street, was also fined 40s. and costs for a like offence.

At Workop Police-court, on the 24th ult., George Baines, Workop, was charged with selling milk which was otherwise than that of the nature of milk. Inspector Garforth said he procured a quart of milk from the premises of the defendant, and found on analysis that it was composed of 80 per cent. of milk, and 20 per cent. of added water. The defendant said he was quite unaware that anything was wrong with the milk. He was not at home that morning. The milk which the inspector had got was what had been put aside for themselves. P.C. Bransby proved the purchase of the milk. Fined 20s. and costs, or a distress. —George Taylor, of Workop, was charged by Inspector Garforth with refusing to sell milk to P.C. Bransby on a recent date. Inspector Garforth said he sent P.C. Bransby to buy some milk from the defendant, who refused to sell him any. Witness went himself, and the milk was still refused by defendant. In reply to the charge, defendant said he had just bought the milk in question of a man who made it up to his own strength. (Laughter.) George Barnes said he sold to the defendant on April 30th six pints of milk. He did not tell the defendant that he had made it to his own strength. In reply to the charge, the defendant said that the reason why he refused to sell the milk was because it was not good. Fined 20s. and costs, or a distress. —Peter Lister, milkseller, of Workop, was charged with selling milk which was adulterated. Fined 20s. and costs.

At the Rochester County Police-court, on the 16th ult., Walter Long was summoned for selling adulterated milk at Chatham. A fine of 20s. and 12s. costs was imposed. Frances Oliver pleaded guilty to selling adulterated milk at Chatham, and was mulcted in the sum of 20s. and 11s. costs. Arthur Charles Sutton was fined 20s. and 11s. costs for a like offence at Chatham.

At Tisbury Petty Sessions, on the 18th ult., William Baker, of Tisbury, was charged by Mr. Frank Beardslev, Inspector under the Food and Drugs Act to the Wilts County Council, with selling a quantity of milk, on April 28th, from which 44 per cent. of the fat had been extracted. The certificate of the Analyst showed that the milk only contained 4 per cent. of cream, and that 44 per cent. of the natural fat had been abstracted. For the defence Mr. Marsh contended that there had been no dishonesty with regard to the sale of the milk, which had been obtained that morning from the Tisbury depot of the Salisbury, Semley, and Gillingham Dairies Company, where it had been emptied direct into defendant's churn from one obtained from Mr. William Perrett, of West Tisbury. About the time of the occurrence the milk obtained from that place only contained 7 per cent. of cream, and the difference of 3 per cent. between that and the 4 per cent. which the Analyst said the milk contained was accounted for by the fact that quantities of the milk had been taken from the pan in which it had been placed, and the cream had therefore been lessened in the milk at the bottom of the pan, where that which was served to the Inspector was obtained from. Defendant, sworn, bore out the statement made on his behalf. He said

no cream had been abstracted from the milk during the time it was in his possession. Mrs. Susan Baker corroborated. Fred. Baker, son of defendant, gave evidence that he fetched the milk from the depot of the Dairy Company in the morning, where he emptied it direct from the churn in Mr. William Perrett's cart into a churn of his father's. William Perrett, farmer, of West Tisbury, said that he sent milk to the Dairy Company's depot at Tisbury. A few days before the 28th he received a letter from the manager of the depot complaining of the poor quality of his milk, the cause of which was the kind of food he was giving his cows at the time. He had never abstracted any cream from milk supplied by him to the Dairy Company. William Mounty, manager of the Tisbury depot of the Dairy Company, deposed that about the 26th April he tested a sample of Mr. Perrett's milk, and found that it contained only 7 per cent. of cream, whereupon he wrote and complained to him. A sample of the milk tested on the 17th inst. contained 9 per cent. He attributed the difference to the kind of food given to the cows. He saw the witness, Fred. Baker, take the milk from Mr. Perrett's churn; no cream had been abstracted from it. Gilbert Baker, another son of defendant's, also swore that no cream had ever been taken from milk at his father's house. The Chairman said it was clear there was no fraud on the part of the defendant, but the milk was of a very poor standard, and folks who bought milk must be able to get the real article. Defendant would be fined £2 with costs.

BUTTER.

EXCESS WATER IN BUTTER CONVICTIONS.

At the Huddersfield Police-court, on the 17th ult., Alfred Plank, manager, Danish Butter Company, 52, New-street, was summoned for selling butter containing an excess of water. Mr. Lightfoot bought the butter for the purpose of analysis on the 26th April, and the certificate of the Analyst stated that the butter contained an excess of six per cent. of water. The defendant said he was not aware that the butter was poor, but a penalty of 10s. and costs was imposed. [We commend this conviction to the attention of Burnley and Saddleworth magistrates who shield fraud, that when next these Nupkinses try a case of palpable robbery of the public, they will manifest, at least, a little intelligence. The Wholesale Co-operative Society also may profit by the above, and the following case taken from the *Cork Weekly News*, May 13th.]

At the Cork Police Office, Julia Scannell, was prosecuted under the Food and Drugs Act by the Sanitary Authorities for selling butter on Saturday, the 15th April, which was unduly adulterated with water. Mr. Gavin, solicitor, who prosecuted, said that the case was a very bad one, as a sample of the butter which the woman was selling on the day in question was analysed by Mr. O'Mahony, Public Analyst, and it was found that the sample was watered to the extent of one-fourth. The trade carried on by such persons as the defendant was very extensive, and all the more serious, because it was practised on poor people. The trade had brought into existence a regular class of persons, who were known as "butter slashers." The Bench imposed a fine of 2s. 6d. and costs. [The fines in both these cases are shamefully inadequate, but the point to be noted, is that Inspectors and Local Authorities prosecuting before persons like those at Burnley and Saddleworth, should plainly point out that unless the magistrates do their duty in protecting the public from fraud, it will be necessary to bring such disgraceful magisterial decisions before the notice of the Lord Chancellor. A few removals from the Bench such incapables like those at Saddleworth and Burnley, would have a wholesome effect.]

PROTECTING THE PUBLIC AND DAIRY FARMERS.

At Ashford Police-court, Mr. Sutton, grocer, Pluckley, was summoned under the Food and Drugs Act for selling adulterated butter, and also for exposing for sale margarine which was not labelled as such. Mr. H. J. Bracher appeared for defendant. Police-constable White stated that from instructions received from Superintendent Wenham he visited defendant's shop on April 24th. He saw defendant's daughter, and asked to be served with one pound of butter, for which he was charged 1s. 2d. The butter was brought in from the back of the premises in a dish and placed on the counter. There was nothing on the dish to specify what the contents were. Superintendent Wenham stated that when he received the butter from Police-constable White, defendant said to him "I hope I shan't hear anything more of this, Mr. Wenham. I did not sell this as butter; I sold it as margarine." Witness submitted a sample to the Public Analyst, who certified it to consist wholly of foreign fat. Mr. Bracher pleaded guilty to both offences on behalf of defendant, and he was fined £10 for the first offence, and £5 for the second, with £1 4s. costs. Defendant was allowed a month in which to pay the money.

At Liverpool, on the 17th ult., Thomas J. Hayes, 236, Falkner-street, was summoned for having exposed for sale four lumps of margarine which bore no labels. Inspector Baker deposed to visiting the defendant's shop and finding the margarine unlabelled. The defendant pleaded that the keg from which he had taken the margarine was stamped, and he thought that was sufficient. Mr. Stewart imposed a fine of 10s. and costs.

COFFEE.

At Rochester, on the 16th ult., John Frost was fined £2 and 11s. costs for selling adulterated coffee at Chatham.

SPIRITS.

At the Shire Hall, Nottingham, on May 28, convictions were obtained on the evidence of Inspector Storey in each of the following cases:—Joseph Burrows, Beeston, was fined 30s. for selling gin adulterated with 3 per cent. of added water; Samuel Blatherwick, of Carlton, 40s. for selling whisky with 4 per cent. of added water; and Henry Ashby, of the Volunteer Inn, Carlton, was fined £5 for selling whisky adulterated with 10 per cent. of added water beyond the 25 per cent. allowed by law.

DISEASED MEAT PROSECUTIONS.

UN SOUND PORK.

At Leeds, on the 26th ult., Ann Maria Twamley, pork butcher, North-street, was summoned for having had in her possession certain pieces of pork which were found, on examination, to be unfit for human food. Mr. C. C. Jolliffe, Deputy-Town Clerk, prosecuted. From the evidence adduced, it seemed that an Inspector from the Leeds Sanitary Department visited the defendant's shop on the 15th ult., and in the cellar found some pieces of pork unfit for food in a hamper, and other portions of the same pig in brine. Mrs. Twamley placed no difficulties in the Inspector's way.—Mr. Swallow, Sanitary Inspector, said he did not think the animal had suffered from any disease, but in his opinion it had not been properly killed.—Dr. Cameron, Medical Officer of Health, deposed that he examined the meat, and found it soft, flabby, offensive to the smell, and quite unfit for food. In answer to Mr. Peckover who appeared for the defendant, Dr. Cameron said that on the 14th and 15th the weather was very bad for keeping this class of meat. For the defendant, Mr. Thomas Riley, pig dealer, was called, and said he sold the animal to Mrs. Twamley. It had come from Newcastle on the 13th, and on the way had had a leg broken, and been bruised about the body. He saw the pig after it had been killed, and in his opinion the meat was then quite sound. The man who slaughtered the animal also said the meat appeared to him to be perfectly good. The man employed on Mrs. Twamley's premises stated that the defendant had not seen the meat when the Inspector called. After other evidence had been given, Mr. Peckover addressed their Worships at length, pointing out circumstances which he thought justified them in dismissing the summons. The magistrates, however, decided to convict. Mr. Jowitt said they were convinced that the defendant herself knew nothing about the condition of the meat, but she was responsible for the acts of her agent, and unfortunately she had employed a man who, when in business on his own account, had been imprisoned for an offence of this kind. The Bench, however, decided to convict, imposing a penalty of £1 in respect of each piece of meat—£10 altogether. They had, pointed out the Chairman, power to inflict a full penalty of £200.

AN ANATOMICAL KID.

At Dublin on the 25th ult., Edward Redmond, was summoned by Food Inspector Green, for exposing for sale a kid unfit for human food. Inspector Green, examined by Mr. M'Sheehy, who prosecuted on behalf of the Corporation, said he was offered the kid for sixpence. He took it to Sir Charles Cameron, who pronounced it unfit for human food. The entire carcase weighed only one pound and fifteen ounces. Sir Charles Cameron, examined, stated that the kid was absolutely unfit for human food. It presented the appearance of an anatomical specimen in a museum. The sides were almost transparent. It was slightly decomposed, but that did not affect the matter. Mr. O'Neill, examined by Mr. J. J. Walsh, solicitor, for the defence, said he was a farmer residing at Whitechurch. He saw the animal, and was of opinion that it was fit for food. Mr. Redmond was also examined, and said he considered the kid fit for food. A kid or a young animal was likely to get bad rapidly, especially in the present weather. Mr. O'Donel said he was of opinion that the kid was unfit for human food, and he would fine Mr. Redmond £5. Mr. Redmond said he would appeal in the case. The kid was fit for food.

THE PAISLEY APPEALS.

At the Justiciary Appeal Court, on the 22nd ult. At Paisley, on 14th March, 1893, Sheriff-Substitute Cowan convicted Robert Drew, butcher, Barrhead, of an offence within the meaning of the Public Health (Scotland) Act, 1867, section 114, in so far as on 3rd March he wilfully obstructed Alexander C. Aitken, Sanitary Inspector, while acting under the authority and employed in the execution of the Act, in respect that notwithstanding the seizure on 3rd March of the carcasses of two cows, which appeared to be unfit for human food, within premises at Barrhead, he, in knowledge of the seizure, took forcible possession of the carcasses, and conveyed them to the slaughterhouse in Moor-street, Glasgow. Drew was ordained to pay £3 modified penalty, and £3 expenses. Various questions were raised in this appeal by Drew, one being as to the relevancy of the charge. After hearing counsel for the appellant, their Lordships dismissed the appeal, with £7 7s. expenses, holding that the Sheriff had decided rightly.

In the other appeal, John Parkhill, butcher, Barrhead, brought under review a conviction by the same Sheriff-Substitute, and fine of £5 with £3 of expenses, on a charge of contravening section 26 of the Public Health (Scotland) Act, 1867, in so far as on 6th March, 1893, he was the person to whom the carcase of a cow belonged which there was probable cause for believing was intended for human food, and which was seized within premises used by him as a slaughterhouse. The questions of law submitted were *inter alia* whether a slaughterhouse in the purview of section 26 is comprehended within the expression "premises" of said section. Their Lordships held that the Sheriff had rightly decided the case, and dismissed the appeal with £7 7s. expenses.

A SAD WASTE.—During last year no less a sum than £36,487 was subscribed in the country by persons whom the *World* describes as "infatuated enthusiasts towards the Utopian object of converting the Jews to Christianity." The annual report states that 12 "converted" Jews were confirmed during the year, of whom, however, only five were adults. It appears, therefore, that it costs about £3,040 to convert each Jew, but this is far too low an estimate, inasmuch as seven out of the 12 were "infants," and in England, the while, coroner's juries return verdicts of deaths by starvation.

FOOD AND DRUGS INSPECTOR'S REPORT. COUNTY OF DURHAM.

Mr. B. Scott Elder in his report to the Council of the County of Durham, says:—

"During the past year proceedings have been instituted for infringement of the Weights and Measures Acts against traders as follows:—10 butchers, 2 beerhousekeepers and innkeepers, 16 coal hawkers and dealers, 8 confectioners, 7 fruiterers, 6 greengrocers, 8 grocers, 4 hawkers, and 5 general dealers. It is satisfactory to note, however, that tradespeople generally are now paying very much more attention to these matters, and that the number of prosecutions is gradually diminishing, only 14 informations having been laid last quarter, and those for offences not of a serious character.

"The operations under the Food and Drugs Acts have revealed the fact that there is still much adulteration in articles of food, and several very important prosecutions have been instituted, especially in the Durham and Chester-le-Street Districts, the Bishop Auckland District having been quite exceptional in this respect. The total fines inflicted during the quarter amount to £59 3s. 0d., which is considerably in excess of any quarter for many years back.

"At the hearing of a case for the adulteration of lard (of which there have been several during the quarter), the solicitor for the defence produced written warranty. The bench, in giving judgment, after a hearing which occupied about two hours, said they were of opinion that the article had been adulterated, but as the warranty had been placed before them, they could only levy upon the defendant the amount of costs, in accordance with Section 25 of the Act. This is the first written warranty which has been produced in this county for some years, and in view of its importance I ask for instructions as to taking proceedings in the matter against the wholesale traders for the issue of a false warranty.

"Samples of milk supplied to various Public Institutions throughout the county have been obtained, and I am pleased to report that the results have been satisfactory in every instance.

"The adulteration of butter—or rather the unavowed substitution of Margarine—forms an important item in the returns for this quarter. Four informations have been laid against traders for offences against the Margarine Act, in addition to the summonses taken out under the Food and Drugs Acts as per appended statistics. Margarine is now manufactured with such skill and made to resemble butter so closely by the aid of colouring matter that it is exceedingly difficult, if indeed, not actually impossible, to distinguish one from the other even on close examination. At the hearing of a charge preferred against a "butter company" for exposing margarine for sale in the shop window without being labelled, the manager pleaded as an excuse that he was ignorant of the law. I ventured to suggest to the Bench the desirability of companies which make a speciality of the sale of butter and margarine having the provisions of the Margarine Act printed and prominently displayed in their establishments, so that their managers and employés might know exactly what was required of them. The Bench considered the suggestion an admirable one, but, of course, had no power to enforce its adoption. A fine of £1 and costs was inflicted. During the quarter another "butter company" was fined the full penalty of £20 and costs for selling as butter a mixture containing 50 per cent. of foreign fat.

I need hardly mention that in the purchase of samples no attempt is ever made to take undue advantage of any trader. It is, of course, absolutely necessary that the purchaser should conceal his identity as far as possible, but beyond that the purchases are identical with ordinary every day transactions.

The following extract from the last annual report of the Local Government Board shows at a glance the extent of the working of the Acts throughout the whole of the county of Durham. The Local Government Board considers the analysis of one sample per annum for every 1,000 inhabitants to be evidence of satisfactory administration:—

AUTHORITY.	POPULATION.	SAMPLES EXAMINED.	SAMPLES ADULTERATED.
Durham—			
County Jurisdiction	642,512	633	78
Boroughs—			
Durham	14,863	—	—
Gateshead	85,709	40	9
Hartlepool	21,521	41	1
South Shields	78,431	32	4
Sunderland	130,921	28	1
West Hartlepool	42,492	43	7

7th April, 1893.

B. SCOTT ELDER.

DR. BELL AND THE PUBLIC ANALYSTS.

The Civilian, May 27th says:—

"The Society of Public Analysts have secured the co-operation of Lord George Hamilton in their hostility to the Inland Revenue Laboratory. The noble lord has given notice of a question to the President of the Local Government Board, asking whether there is any objection to Dr. Bell being directed to comply with a request, made by 119 members of that society, to alter the form of certificate given by him in cases of the analytical examination of milk. It is suggested that the present certificate, signed by the head of the Laboratory, might lead to failures of justice, and that in future it should be clearly stated in all such certificates, that owing to the decomposition it is impossible to obtain analytical results comparable in accuracy with those yielded by milk when it was

fresh. Unless some cogent reason can be given for refusing to meet the views of the society, we do not see why the department should place itself in an antagonistic position on this subject."

At the last meeting of the Middlesex County Council the General Purposes Committee reported that in the case of a man summoned for having sold milk certified by the County Analyst to be adulterated with 4 per cent. of added water, a sample of the milk had been subsequently analysed by the Somerset House analyst, who reported that he could not find that any water had been added to the milk. The justices of the Gore Division thereupon dismissed the summons, and ordered the payment to the defendant of £6 16s. 10d. as costs. The committee had since been informed by Mr. Bevan, the County Analyst, that it was impossible, after milk had been kept for more than a month, as in the case in question, to make a correct analysis. The committee had also had before them a copy of some correspondence which had taken place between the Society of Public Analysts and Dr. James Bell, the Somerset House analyst. In this correspondence the society in question expressed regret that Dr. Bell should certify in a manner liable to be interpreted by the Court as definite on samples of milk which had been kept for a considerable time, and which therefore, when examined by him, must have been in such a condition as to preclude any trustworthy opinion being formed respecting their original composition. The society further expressed the hope that in future Dr. Bell would, in any like instances, see his way to clearly stating in his certificates that, owing to decomposition, it was impossible to obtain analytical results comparable in point of accuracy with those yielded by the milk when it was fresh. In view of the importance of the question, the committee, without waiting for the meeting of the Council, had suggested to the M.P. for one of the divisions of Middlesex that he should ask in the House of Commons what objection existed to Dr. Bell complying with the request referred to. The action of the committee in the matter was approved.

THE MAIDSTONE INSPECTOR AND ADULTERATED MILK.

Mr. Jackling had a batch of offenders before the Court last week.

William Hinckley was summoned for selling adulterated milk on 23rd April.—Mr. S. L. Monckton represented the authority, and Mr. A. J. Ellis defended.—Mr. S. L. Monckton stated that Mr. Jackling, the Inspector of the authority, purchased a pint of skimmed milk on 23rd April, and on being submitted to the public analyst, it was found to contain 33 per cent. of added water.—Mr. Jackling proved purchasing the milk.—Mr. Ellis contended that the Act states that the sample should be divided into three parts, but Mr. Hinckley swore that it was only divided into two.—William Hinckley, the defendant, stated that he only saw Mr. Jackling divide the milk into two parts when he purchased it from him. He also purchased a pint of new milk. He saw Mr. Jackling the next day, and he asked him what number he put on his bottles.—The Bench convicted, and fined defendant 20s. and 10s. costs, or 14 days.—John Steer was summoned for a like offence on the 22nd April.—Mr. S. L. Monckton prosecuted, and defendant pleaded not guilty.—Mr. Jackling proved purchasing the milk of defendant across the plain on the day named. The certificate stated that there were 11 parts of added water.—Defendant was fined 20s. and 9s. costs.—The Mayor and Alderman Clifford did not adjudicate in these cases, they being members of the prosecuting authority.

CARDIFF HEALTH COMMITTEE AND CHOLERA.

Dr. Walford, Medical Officer of Health, at the last meeting of the Health Committee, said that a Chief Inspector and two Assistant Inspectors comprised the staff of the Port Sanitary Authority.

Dr. Walford referred to certain reports that had been made in the newspapers reflecting upon the authority, but there was not the slightest truth in them. The arrangements for preventing cholera from coming into the district were perfectly complete. He was glad to say that there was not the slightest danger of cholera cases existing at the present time without the matter coming at once to the attention of the authorities. No vessel could possibly enter the port with sufferers from the disease on board without the circumstances being immediately known to the Inspectors, who would communicate with him. (Hear, hear.) He added that a steamer would be on duty during the whole of the summer, and the Sanitary Officers would be on board, and if a vessel were infected she would be boarded immediately. Cholera cases would be removed to the Flat Holm, and every vessel from an infected port would be tested as the orders required. The water would be pumped out and other precautions taken to prevent the spread of the disease. He did not know any port in the kingdom where the arrangements were more complete or perfect than in Cardiff. They were in a very different position to that which they occupied a few years ago when they were dependent upon the Customs' officials to report to the Sanitary Authorities. They had their Inspectors to do the work now.

PUBLIC HEALTH NOTES.

THE SANITARY CONDITION OF LONDON THEATRES.

THE excellent series of articles appearing in the *British Medical Journal* upon this question must be exceptionally unpleasant reading for "thick and thin" advocates of handing over everything to the London County Council.

THE BRITANNIA THEATRE,

after examination by the *British Medical Journal's* expert, is reported on as follows:—"The drainage generally was very defective, water-closets and urinals without water supply, bad junctions with drains, lavatory waste pipes untrapped, and connected with drain or with soil pipe; defective water pipes in direct communication with drain, bell traps, &c. Several of the retiring rooms were dark and without ventilation. One lavatory waste pipe was unconnected with any drain, and discharged its contents under the floor of the stage, the earth at this point being found choked with them, and foul smelling." The ballet room was five feet ten inches at the highest point, and in some places even less, and it had no ventilation. The reason given for the lowness of the room was, "that the County Council ordered fire-proof floors above, but in doing so had neglected to see that a corresponding lowering was effected in the rooms below." This and other like insanitary conditions are now being remedied, but it is a scathing rebuke on the character of county council theatre inspection.

THE ALHAMBRA.

Reading between the lines of the *British Medical Journal's* report, the revelations as to this theatre are very discreditable to the humanitarian instincts of the directors. The ballet girls' dressing-rooms are thus described:—

"The dressing-rooms on the 'prompt' side are three in number, one above the other, and each accommodates about twenty ladies of the ballet, and has thirteen gas jets, with a cubic space of about 5,000 feet. The initial air space calculated on the requirements of the Factory and Workshops' Acts would give the proper allowance of air to sixteen persons and twelve gas jets, but this low standard presupposes sufficiency of ventilation, which does not exist here."

The polluted state of the atmosphere of these dressing-rooms thronged by twenty women bathed in perspiration after a rushing, breathless "farandole" we will leave our readers to imagine. Contrast this neglect of ordinary hygienic laws with the following account of the wine and beer cellar. "It is paved," says the *British Medical Journal*, "with concrete, and carefully ventilated, the same temperature being maintained as closely as possible throughout the year." The mere woman who sweats her way through two exacting ballets per night, and rehearsals daily, for fifteen shillings to a guinea per week, is packed away in a stifling, badly ventilated, air-polluted dressing-room. If her health "go off," she can be replaced by hundreds of other women struggling even for the meagre wages of an Alhambra ballet girl; but the beer? Ah! should that "go off," it is a dead loss, and can only be replaced by fresh beer that costs money, which, unintentionally let us hope, shows the exact respective regard in which the Alhambra directors hold the health of the ballet girl and that of the beer barrels. We confess to a feeling that we would rather see the Alhambra £10 shares, now quoted £24, a little lower, and the enormous dividend even a little less, than the people who earn the immense profits should be cared for more like human beings. We trust the result of the *British Medical Journal* enquiry will be, as far as London theatres are concerned, to cause every one to be put into the most perfect sanitary order, but we have dwelt upon these specimen defects in the hope that the Medical Officers of Health and Sanitary Inspectors throughout the United Kingdom, who have so loyally assisted our efforts in many directions, will inquire into the sanitary conditions of the theatres and other places of amusement in their respective towns, not limiting their examinations to the auditorium, but making a strict inquiry into the drainage, ventilation, &c., of the actor's dressing-rooms. Our contemporary, *The Stage*, has often shown the need of such an examination, and the lives of many hardworking members of the theatrical profession have, as our contemporary has times over lamented, been sacrificed to the insanitary dressing-rooms, &c., of provincial theatres.

KILLED BY BAD DRAINS.

On the 15th ult. Mr. Wynne E. Baxter held an inquest at the Mile End Vestry Hall with reference to the death of George Lawrence, aged 38, a beer retailer, late of the St. Dunstan's Arms, St. Dunstan's-road, Mile End Old Town. The drains at the above premises had been stopped up, and on Thursday week the deceased attempted to clear them. He was subsequently seized with diarrhoea and vomiting, and, notwithstanding the attention of two medical men, death ensued. Dr. Kennedy stated that he was of opinion that death was due to exhaustion from pneumonia and diarrhoea, the latter being the result of the foul odour from the drains. A verdict in accordance with the medical evidence was returned.

UNSANITARY DWELLINGS AT SUNDERLAND.

The Medical Officer (Dr. J. C. Wood) has presented a report to the Health Committee of the Sunderland Corporation respecting the houses comprised in the area between Spring Garden-lane and Chipchase-street, at the east end of the town. There are over 100 houses, inhabited by 600 persons, which the doctor condemns as unfit for human habitation. The Borough Surveyor (Mr. R. S. Rounthwaite) estimates that it would cost £11,500 to purchase the property, pull it down, and do the necessary street and sewer work. The Health Committee have the matter under consideration. When will this disgraceful Sunderland Corporation begin to put the Food and Drugs Acts in operation?

ROTHERHITHE AND SANITATION.

The insanitary gang who rule Rotherhithe must be a sore trial to Medical Officers and Sanitary Inspectors. They have for many years persistently burked the Sale of Food and Drugs Acts, so much so that the poor are plundered by margarine sold as butter and like swindles in every direction. Their sanitary forwardness was thus evidenced at their last meeting:—

Dr. Shaw called attention to the very sharp epidemic of small-pox, and asked the Vestry to consider: (1) That complaints had been made from a neighbouring parish as to the destruction of infected articles in their district. Would the Sanitary Committee take into consideration the erection of a destructor in conjunction with some adjoining parish?

Mr. Read inquired if it was a fact that infected bedding and other material was taken to a neighbouring factory to be destroyed, and that the lads engaged on the premises got hold of some of it and sold it to a rag-shop. Mr. Edwards (Sanitary Officer) stated that they received permission from Mr. Stokesbury to destroy the articles in his furnace. The materials were taken straight to the furnace and at once destroyed. Nothing more would be destroyed on the premises named. Mr. Read stated that according to the information he received, the materials were taken to Mr. Stokesbury's at night and not destroyed till the next morning. The chairman pointed out that Mr. Read's question had not been answered. Mr. Edwards was understood to say that nothing of the kind could have taken place. Mr. Stokesbury's furnace would not be used again, as he intended to burn the articles in his own back garden. ("Oh.")

Mr. Stuart: I shall strongly object to the articles being burned in Rotherhithe unless under proper arrangements—(hear, hear).

A pleasant state of things truly is here revealed. No wonder there were thirty-four cases of small-pox reported within a fortnight, as also eight of diphtheria and six of scarlet fever. The Vestry has for long cherished a mill stream that is described by one member as "stinking most horribly," and by another as being in a "most disgraceful condition." A Mr. Walker expressed the opinion, "no wonder there was fever in the locality," and that "it was being bred and propagated by the millstream." We would recommend a refuse destructor manufacturer to interview the members separately, and point out that it is, to put it mildly, disgraceful that the Sanitary Inspector of an important London parish should have to consider the question of destroying infected articles in his back garden, or the alternative of allowing them to spread disease broadcast. We wonder how many members of this Vestry are slum property owners, and how many are shopkeepers. That a goodly number must be shopkeepers is evident from the fact that the Food and Drugs Acts are so persistently burked in Rotherhithe.

SUNDERLAND WANTS AN INSPECTOR.

At the Health Committee meeting on the 25th ult., the question of appointing a Sanitary and Meat Inspector was considered. There is a vacancy on the Sanitary Staff. An important proposal was made by Councillor J. H. Smith, and seconded by Councillor Calvert, to the effect that an officer should be appointed to inspect meat, dairies, cowsheds, &c., at a salary of £150 a year. This motion was not carried. It was ultimately decided to advertise for a man holding a certificate as a Sanitary Inspector, and also having a special knowledge of the butchering business; and to offer a salary of £80 a year. There were some indignant protests against offering such a salary to a man with the qualifications demanded.

We are pleased to see that some of the members of this disgraceful Corporation have a sense of shame, and that there were protests against so beggarly a decision. Any Sanitary Inspector possessing the qualification who would accept the position at such a shameful pittance would be as contemptible as the Health Committee that offers it. As it might break the back of the Town's finances to advertise their wants, we therefore give them this advertisement free gratis. Our readers may remember that this miserable corporation advertised, not long ago, for a Public Analyst at £5 per year.

DEPLORABLE SANITARY ARRANGEMENTS AT SNAITH.

At a meeting of the Goole Board of Guardians, Dr. Wilson reported on the deplorable condition of the sanitary arrangements at Snaith. The principal matter he had to report was the outbreak of sickness, including influenza and measles among the children; the extent of the sickness had been such that both the Church and the Wesleyan Schools had been closed, and there had been one death. Complaints were also made as to foul smells arising from drains. Orders were given for the Surveyor and Guardians to see the work immediately attended to.

APPLEDORE'S SANITARY CONDITIONS.

Mr. Fishwick, owner of a house in Myra-court, Appledore, attended the Northam Local Board meeting on Saturday, and complained that through the recent heavy rains the drain which carries the sewage away from the cottage, had burst. As a result, "the sanitary conditions were running all about the streets, and the smell was something awful." The sewage had found its way into the well from which the cottages were supplied, rendering the water supply unfit for use. Mr. Fishwick urged on the Board the importance of dealing with the matter at once, and reported that he was authorised by Mr. Beara, who owned another of the houses, that if the Board did not act at once, he would put men to work and sue the Board for the amount. The Surveyor was of opinion that the responsibility of connecting the cottages with the main sewer in Ursha-street rested on the owners of the property, but this Mr. Fishwick did not at all agree with. Eventually a committee of the Appledore members agreed to meet Mr. Fishwick during the afternoon, and consider his complaint.

THE SANITARY CONDITION OF THE HENDON RURAL SANITARY DISTRICT.

DR. H. BRUCE LOW's report to the Local Government Board reveals the malpractices of the demon builder as follows :—

Even comparatively new cottages are sometimes damp, through imperfection of the methods adopted for getting rid of the rain which falls upon their roofs. Some that I saw at Wealdstone, for instance, though their roofs were properly spouted, had their downfall pipes arranged to deliver directly on the surface of the ground beside the dwelling ; so that the rain from their roofs was soaking into their foundations, and with the result that damp could be seen rising both outside and inside on their walls. In this respect they repeated the defects of some older houses that I saw at Stanmore. In very few instances are backyards paved or asphalted ; many of them I found wet and sloppy. At Wealdstone there are houses packed together, so that house refuse accumulating in the small backyards has to be carried through the dwellings to the street to be got rid of. The worst houses in the district are to be found at Edgware, Little Stanmore, and Kenton.

As regards the water supply at Pinner, says Dr. Low, several local wells are still in use. One such well I saw situated in a front garden ; it is about 12 feet deep, dry steined only, and insufficiently protected from surface washings. A "clay-jointed drain" from a watercloset and slop-sink passed within 2 feet of this well. The water of the well becomes at times discoloured and smells badly.

The village of Edgware is still in an unsanitary state for want of sewerage ; but a scheme has recently been sanctioned, after inquiry, by the Local Government Board. The brook which passes through this village has long been used as a common sewer. Into this brook and its tributaries much of the sewage of Edgware finds its way. The larger houses have waterclosets draining into cesspools, the overflow of which discharges into a ditch or brooklet, and thence into the brook itself. The condition of the bed of the brook, in summer especially, is stated to be very bad. Accumulations of excrement and garbage collect in it till a heavy fall of rain flushes away the filth from the watercourse and its tributary ditches. Some houses in Edgware and Little Stanmore have no drains at all. Slops are thrown out in the garden to the roots of trees and bushes, or are carried down the garden and emptied into a convenient ditch.

EXCREMENT AND REFUSE DISPOSAL.—A large number of dwellings have water-closets. In the cottage class of property these closets are usually situated out of doors ; most of them are flushed only by hand, and many of them were in a dirty state at the time of my inspection. Some of the basins were coated with filth ; some were completely choked up and unusable, and in other cases the basins were cracked or broken. At Wealdstone the closets are generally supplied each with a flushing-box ; but it is of the kind known as a "waste preventer," and only flushes so long as the chain is pulled. Careless persons, or those in a hurry, do not drag on the chain long enough to flush the basin completely ; consequently I found many such closets in a filthy state from want of sufficient flushing. In some cases the flushing apparatus was out of order, and the closet was choked up with excrement. In several places, e.g., at Alperton, waterclosets appeared to be used by day as poultry houses. In such instances the seat of the closet was covered over with the droppings of the poultry. In cold or wet weather the poultry sometimes spend the day in the watercloset.

Privies are in use at Edgware, at Elstree, and in some outlying parts of other villages. Some of these privies have deep vaults under them, and the retention in this way of large quantities of filth close to houses for periods of time of from 12 months to 2 years, gives rise to considerable nuisance. Some of these deep privy vaults are provided with an overflow into an adjoining ditch. At Elstree, for example, behind a row of eight wooden cottages near the canal reservoir, there were eight wooden privies side by side, erected over a pit which measured 33 feet long by 3½ feet wide, and which was stated to be 6 feet deep. This is emptied, as the people said, once a year. At the time of my visit the place had an offensive smell. At Alperton and elsewhere privies were found dilapidated, with doors off their hinges, and sometimes with excrement upon the seats. Earth-closets are in use in some parts of the district, as for instance at schools. At some board schools there are trough closets, all of which were in good condition when I saw them.

With regard to house-refuse there are no arrangements for public scavenging. Each occupier has to get rid of the refuse as best he may. Where there are gardens and allotments, no particular difficulty is experienced in dealing with it ; but where there are no

back gardens or allotments, or where there is only a small backyard, the occupier is often at a loss what to do with his house-refuse. At Wealdstone, for example, I saw that in many cases it had been deposited upon unoccupied building land, notwithstanding a notice posted there, threatening offenders with penalty for so doing. In some cases house-refuse had been surreptitiously deposited on the roadside. Some persons were found bedding their backyards with ashes and house-refuse, and other people were using their ashes for making paths. Ash-bins are hardly ever to be seen in connection with cottage property in the district. In some places several cart-loads of house-refuse were lying accumulated in yards common to groups of dwellings, and piled up till it could be removed. In these parts of the district, e.g., Alperton, Wealdstone, Edgware, ash-refuse lies about in all directions.

With regard to the source of infection of the first case of scarlet fever, in August, 1891, at Harrow Weald, Mr. Gowan, the Medical Officer of Health, made enquiry at the time, and satisfied himself that the infection was brought to Harrow Weald by some children sent down by a charitable association from London (from Stepney it is stated) for a fortnight's holiday. So far as I could learn, no actual signs of the disease (e.g., peeling of the skin) were seen upon these London children ; but they are said to have looked pale and sickly ; one little girl is said to have told a villager that she had been recently "very ill," but was better now. The first case in Harrow Weald was a child who slept in the same room as this girl.

The following is Mr. Gowan's account of the case quoted from his annual report for 1891 :—

"On August 31st a case of scarlet fever was discovered in a house at Harrow Weald. There is practically no doubt that the disease was imported by children sent down from London for a country holiday by a charitable association. In his report for 1889 Dr. Thompson (the late Medical Officer of Health) dealt exhaustively with this system, and the evils which he foreshadowed were only too abundantly manifestly in this instance. . . .

"The house into which the children were received was in every way unfitted for their reception, their presence caused overcrowding, and the children of the house was suffering from ringworm, a highly contagious disease. It is probable that the visitors, in exchange for their scarlet fever, received the contagion of ringworm."

In company with the Medical Officer of Health I visited the house here referred to, which consists of one living-room, two bedrooms over the living-room, and a small back kitchen. The family consists of the parents and four children. The mother told me that during July and August, 1891, she had had boarded with her 13 children in four lots, all from London. The last "lot" consisted of five little girls who "looked pale and sickly." Three of them slept in a bed made up in the living room, while the other two slept in one of the small bedrooms with two of her own children. One of her own children who had slept in the same room as two of the girls, was taken ill with scarlet fever on August 31st, within one week of the date of departure of the London children from Harrow Weald. Shortly after, a second child of hers also sickened with scarlatina. I questioned the mother as to evidence of scarlatina illness in the visitors, but owing to the lapse of time since the London children left (about 15 months), she was unable to give me any information of a satisfactory kind. The balance of evidence seems to be in favour of the Medical Officer of Health's view that the disease was imported by these children from London in August, 1891.

Mr. Mudford, Editor of the *Standard*, whose importance was recently so terribly ruffled by a Sanitary Inspector, would doubtless condemn as an unwarranted intrusion such an inspection as was made of a private gentleman's mansion at Harrow Weald, in which 15 cases of diphtheria occurred. The sanitary arrangements of the mansion were, says Dr. R. Bruce Low, "highly unsatisfactory."

"There were eight waterclosets in the house, most of them in the centre of the building, and not against outer walls. They were nearly all in atmospheric communication with bedrooms. The fittings were of an antiquated kind ; there was no ventilation of soil pipes ; bad smells came up the bath waste pipes. There was a leaking drain in the basement, which, with the other enumerated unwholesome conditions, may very possibly have helped to add intensity to the disease when once introduced into the house ; but I do not regard them as likely to have been concerned in its origin."

It is interesting to learn that the Medical Officer of Health, of whose care and ability Dr. Bruce Low speaks highly, is passing rich on the munificent salary of *thirty shillings and tenpence per week*. We would only remark that a Medical Officer of Mr. Gowan's capacity seems to be wasted upon a gang of rural rulers, who appreciate the services of a trained medical expert at a less value than those of a gamekeeper or groom. From the above report of the sanitary condition of one of the resident's mansions, we are not surprised to learn from Dr. Low :—

"That during the last few years several attempts had been made to obtain a suitable site for an isolation hospital, but that the acquisition of each of the spots selected had been stoutly opposed by the parties resident in the several neighbourhoods, and that a site had not therefore as yet been obtained. But for this continued opposition, I understand the Sanitary Authority would have before now been in possession of a hospital, it being stated that they are quite alive to the necessity of having one. Notwithstanding this, I cannot help thinking that, seeing the Rural Sanitary Authority have obtained sites for four sewage farms within their own borders, they could also have obtained, if truly in earnest, the smaller quantity of land necessary for the erection of a hospital.

Amongst other virtues of which this insanitary sanitary authority can boast, we note that the—

"Dairies and cowsheds, though registered and nominally under regulation since 28th January, 1890, have been practically neglected.

"Slaughter-Houses are not registered, nor have any byelaws been adopted to regulate them.

"The Infectious Disease (Prevention) Act, 1890, has not been adopted by the authority; and though the Infectious Disease (Notification) Act of 1889 came into force on January 1st, 1890, no provision has been made for the proper isolation and treatment of notified cases.

"There is no proper apparatus provided for disinfection of clothing, bedding, &c. Such apparatus is a necessary accompaniment of notification and of hospital accommodation; and without it the rural sanitary authority cannot hope to destroy contagion. Fumigation as ordinarily performed in an occupied house is unsatisfactory and unreliable."

We are pleased to learn that this is not the fault of the present sanitary inspector, Mr. B. J. Wyand, who has only recently been appointed. We hope he will, ere long, be able to show a much healthier state of things, but until he does so the jurisdiction of the Hendon rural sanitary authority must be considered a very nice one to live outside of.

PUBLIC HEALTH PROSECUTIONS.

WEST HARTLEPOOL.—DIRTY LODGING-HOUSES.

Owen McCabe was charged, on the 17th ult., at West Hartlepool, with neglecting to keep his registered lodging-house in a clean and wholesome condition. Mr. Wheat, the Sanitary Inspector under the West Hartlepool Corporation, said on the 11th of April he visited the house of defendant, 16 and 18, Rokeyby-street, and there found the stairs, the floors, and the paint work of the rooms in a very dirty condition. The dust was lying thick beneath the beds, and the beds and bedding were fairly black with dirt. A notice was served upon defendant on the same day to clean all the bedding and floors. On the 27th April witness again visited the house, and found the notice had not been complied with. They had certainly made an attempt to do some cleaning, but it had been very indifferently done. Defendant contended that the bedding had been washed. He was a very particular man, and had the rooms swept every day and lifted the windows in good time. Stephen Brown, Assistant Inspector, corroborated the statement made by Mr. Wheat. A fine of 20s. and 10s. costs was imposed. Mr. Appleby stated that it was absolutely necessary that the town authorities should be protected. They were threatened with all sorts of diseases, and unless the lodging-houses were carefully looked after there was great danger in diseases of an infectious character being spread.

A HOUSE LIKE A PIG'S HOUSE.

At the Truro City Police-court, J. P. Rooke applied for an ejectment order against Henry Benallack, a tenant of a house of his in Mitchell-hill. Plaintiff admitted he brought in a paper asking defendant to sign it, and so make him a weekly tenant. He offered to give up all the back rent, £3 10s., if defendant would go out. Defendant said the house was not fit to live in. He would not live in it for twenty-four hours if he could get another. It was like a pig's house. The Bench having considered the case, said it appeared to turn entirely on the point as to whether the tenancy was weekly or quarterly. They were convinced by the evidence that it was quarterly, and therefore the application failed. If the defendant's statement be correct, we wonder what are the Truro Sanitary Authorities about to allow such a state of things to continue.

HOW SCARLET FEVER IS SPREAD.

At the Wolverhampton Police-court, on May 27th, Emma Baugh was charged with unlawfully exposing a person suffering from scarlet fever. Mr. W. L. Bown (from the Town Clerk's office) prosecuted. Albert Hodges, Sanitary Inspector, stated that on March 23rd he visited the defendant's house and saw her daughter, Alice Baugh, who was suffering from scarlet fever. He advised the defendant to isolate the case, and call in a medical man. On March 30th he again visited the house, and found the child peeling from fever, but no attempt had been made to isolate, although the front part of the house was used as a general dealer's shop. The defendant treated the matter with contempt, and on April 6th he found the child playing with other children in the street, and when he called with the Medical Officer of Health, he found the girl handling sweets that were for sale in the shop. The defendant on that occasion called in her neighbours to "blackguard" him. Dr. Malet, Medical Officer of Health, said he saw the defendant's daughter on April 7th, and found her suffering from scarlet fever. The girl was removed to the Borough Hospital, and detained there for five weeks. Another child with whom the defendant's daughter had been playing had caught scarlet fever. Mr. Newnham said it was a very serious case, for the defendant by her conduct might have caused the death of several children. A mild case of scarlet fever was the worst for spreading the disease to others. Defendant was fined 20s. and costs, or one month's imprisonment.

ANALYST'S FEES.—We are glad to find that the Strand Board of Works have increased the salary of Mr. C. H. Cribb, the Public Analyst, from £100 to £150 per year. It is an example which other towns—Hull for example—might with advantage copy.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended May 20th, and May 27th, 1893, together with the quantities imported in the corresponding weeks of the previous year:—

			May 20.		May 27.	
			Quantities.		Quantities.	
			1892.	1893.	1892.	1893.
Animals living:		Number	10,924	4,791	14,943	10,349
Oxen, bulls, cows, and calves	-	-	330	1,239	1,212	2,221
Sheep and lambs	-	-	-	-	-	-
Swine	-	-	-	-	-	-
Fresh meat:—		Cwts.	43,714	20,986	43,136	34,423
Beef	-	-	16,825	50,942	20,085	69,765
Mutton	-	-	1,136	739	919	464
Pork	-	-	-	-	-	-
Salted or preserved meat:—			67,649	64,992	65,669	63,606
Bacon	-	-	6,608	4,070	4,430	5,480
Beef	-	-	25,176	25,977	29,697	30,417
Hams	-	-	5,892	3,247	2,719	2,798
Pork	-	-	2,601	3,136	2,666	3,038
Meat unenumerated, salted & fresh	-	-	15,634	6,181	16,258	7,747
Meat pr'srv'd, o'rwise than by salt'g	-	-	-	-	-	-
Dairy produce and substitutes:—			39,772	47,804	38,832	37,991
Butter	-	-	23,450	20,669	20,750	17,116
Margarine	-	-	18,890	13,995	21,026	25,181
Cheese	-	-	11,604	6,631	10,887	9,370
Condensed milk	-	-	Gt. Hundr. 311,553	236,428	296,250	277,763
Eggs	-	-	Value £ 3,329	3,994	2,386	2,061
Poultry and Game	-	-	Cwts. 505	229	826	247
Rabbits, dead (not tinned)	-	-	27,968	25,287	23,689	26,799
Lard	-	-	-	-	-	-
Corn, Grain, Meal and Flour:—			996,497	934,374	1,529,293	1,868,332
Wheat	-	-	372,133	349,974	386,013	319,417
Wheat Meal and Flour	-	-	88,219	642,871	151,161	253,978
Barley	-	-	483,843	371,435	590,383	452,298
Oats	-	-	45,360	16,355	44,338	64,472
Pease	-	-	97,633	68,940	199,509	19,182
Beans	-	-	601,304	1,037,376	823,489	736,121
Maize or Indian Corn	-	-	-	-	-	-
Fruit, Raw:—			22,257	20,403	33,781	16,196
Apples	-	-	261,963	50,946	111,791	17,430
Oranges	-	-	1,696	22,893	4,620	26,761
Lemons	-	-	19	96	—	470
Cherries	-	-	520	572	475	683
Plums	-	-	10,910	8,341	6,725	13,711
Pears	-	-	598	1,024	266	1,686
Grapes	-	-	-	-	-	-
Unenumerated	-	-	-	-	-	-
Hops	-	-	-	-	-	-
Vegetables:—			68,414	80,156	100,292	52,194
Onions, raw	-	-	35,133	83,874	45,822	169,818
Potatoes	-	-	18,812	26,138	19,672	19,450
Unenumerated	-	-	-	-	-	-

* Not separated in 1892.

Statistical Office, Custom House,
London, May 29th, 1893. } T. J. PITTAR.

CORRESPONDENCE.

To the EDITORS of FOOD AND SANITATION.

THE VINEGAR IMPOSTURES.

Dear Sirs,—For upwards of 33 years we have been brewers of Malt Vinegar, and as such we thank you for the excellent article which appears in your impression of 27th inst. For some few years past our business has suffered greatly, in consequence of the large quantity of impure vinegar, which has been selling at prices we were quite unable to compete with. Not only have we suffered from this cause, but many of our customers, who will only supply genuine goods, have suffered also; and some who would have preferred selling our vinegar, have been compelled, in order to retain their customers (small shopkeepers and others), to supply the impure article, it having been introduced into their town by one or more wholesale buyers, who have again sold it, at prices at which our customers were unable to offer our vinegar. Grocers generally cannot test the quality of the various articles they purchase, and hitherto have relied very much on the representations of the sellers of those goods; but if grocers would only insist on having guarantees of quality on every package and invoice sent them, the wholesale buyers might protect themselves, and their small shop customers too, from proceedings and heavy penalties under the Food and Drugs Adulteration Act. We enclose herewith specimens of guarantees we are affixing to our caskheads, and also to our invoices; and if every Vinegar Firm was obliged to make similar declarations—i.e., his vinegar was dilute acetic acid, or was made from rice or molasses, as the case may be, buyers of all classes would then be protected from imposition, and honest traders would be benefited.

We should be very glad if it became law, that false declarations as to quality of goods should be punishable by penalties of, say, from £5 to £50, made easily recoverable even by the workmen of the producers of any such article, as we think this would deter many from resorting to adulterating goods, a practice which may be carried on extensively before the authorities will take action in the matter, or have, perhaps, any knowledge of it. As regards the acetic acid trade, it appears to us absurd to suppose it would become extinct, even if in future that acid was never used for vinegar making, as there are so many other trades in which it is largely used, and in which it would still continue to be used; and as a very large proportion of that article used in this country is of German make, we think one of our home industries (the malt vinegar trade) has a greater claim on the consideration of all Englishmen, than has that of the German acetic acid maker.

The trade now carried on extensively by grocers, druggists, and publicans of mixing acetic acid and water, and selling it as vinegar, is a thing of recent growth, and the plant and men required to do it is absolutely trifling as compared with that needed by the legitimate malt vinegar brewer.—Yours, etc.,

Pro FARDON'S VINEGAR CO., LTD., A. FARDON, Manager.
Brewery, Glover-street, Birmingham, May 31st, 1893.

Food & Sanitation

With which is Incorporated Food, Drugs & Drink. The Public Analytical Journal & Sanitary Review.

VOL. II. No. 44.

LONDON: SATURDAY, JUNE 10, 1893.

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In Imperial pint and quart bottles,

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(As in the so-called pure Foreign Cocoa).

CHAMPION'S VINEGAR IS ABSOLUTELY PURE.



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EXHIBITED.



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SOLD EVERYWHERE.

ST. HELENS.

The percentage of adulterated samples purchased under the Sale of Food and Drugs Act in St. Helens, according to the report of the medical officer, is only 4.9, against 12.2 all over England and Wales. Of twenty-three samples of butter purchased one was found "rancid and old," one being passable, and all the rest genuine. The samples of lard, pepper, mustard, &c., purchased were all genuine.

It would be interesting to know how the samples are purchased, as it is extremely improbable that 4.9 represents the full measure of adulterated articles of food, drugs and drink sold in St. Helens.

"SANITAS" DISINFECTANTS

Unlike most disinfectants—such as the Coal Tar products—do not rob the air of its vital Oxygen (so essential to animal life), nor merely hide the foul smells of decomposition by their own odour; they actually generate Oxygen in an active form, and destroy offensive matters and disease germs. Moreover, the "SANITAS" Disinfectants are non-poisonous, do not stain, are pleasant in use, and natural in character.

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Author of "Animal Chemistry" (Longmans and Co.); "The Alkali Trade" (Longmans and Co.); and "Natures Hygiene" (Balliere and Co.); &c.

Managing Director and Chemist.

Food and Sanitation.

SATURDAY, JUNE 10, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE LAW AND THE PUBLIC WEAL.

As long ago as April, 1891, Mr. Justice Day and Mr. Justice Lawrence showed the dangerous absurd state of the law regarding diseased meat, in a case wherein they quashed the decision of a magistrate who had convicted a person of exposing diseased meat for sale, because the meat was merely *deposited* and not exposed by *hanging up*. The past few days have seen decisions by these legal humorists just as absurd and injurious to the public. Their first judicial antics were performed with Epps's cocoa, when Mr. Poland, Q.C., propounded the utterly unfounded statement that "prepared cocoa" means "*not pure cocoa*." Cadbury's cocoa is a "prepared" cocoa, and Van Houten's cocoa is a "prepared" cocoa, but both are pure. Yet we have Mr. Justice Day doing what he himself condemns magistrates for doing, "Finding facts without evidence," and even going further by stating:—

"The Inspector does not ask for cocoa, but Epps's cocoa, which I suppose everybody but an Analyst and the agent of an Analyst would know is something different from the ordinary cocoa."

The insult here levelled at the Analysts and Inspectors, reveal the attitude of Mr. Justice Day towards the Acts designed to protect the public from fraud, and the officials who enforce the Acts. From a personal knowledge of the grocery trade for twenty-five years, we have to give Mr. Justice Day's assertion a flat contradiction, and to state that there is not one in fifty of the public who buy Epp's cocoa, who are aware that it is a compound of starch, sugar, and cocoa, and that in point of fact not even many grocers are aware such is the case. Yet Mr. Justice Day and Mr. Justice Lawrence decide otherwise, and that the microscopic announcement here given is adequate disclosure—

COCOA contains a bland Oil, which is pre-eminent as a vitalizing substance, and to remove which Oil in any degree is to lessen its value as a force producer. It is to preserve this Oil when using Cocoa as a beverage, that it becomes necessary that the imported seeds from Trinidad and Caracas should be prepared, and scientifically; for to render the Oil soluble and easy of digestion, it needs to be combined with just so much LOAF SUGAR and WEST INDIA AR-RORWOOD as will effect its perfect incorporation. We guarantee that no other ingredients than those mentioned are used.

After this decision it is not to be wondered at that these judges should fail to see the importance from a public health point of view of the fullest disclosure of the constituents of condensed milk. Local Government Board reports, and thousands of medical men have repeatedly condemned the kind of labelling now indulged in, but our judges prefer to secure the easy laughter the briefless are always ready to accord to even the feeblest of judicial jokers, and to disregard the public weal. We let the following report tell its own tale. A perusal of it makes it very evident that if this be the law, then the public health and the prevention of cruelty to children demand that a strenuous effort be made to alter it.

In the Queen's Bench Division of the High Court, on the 1st inst., the case of Jones v. Davis came on appeal before Mr. Justice Day, and Mr. Justice Lawrence, sitting at a Divisional Court. Mr. Paul Allen appeared for the appellant; Mr. Grain was on the other side. Mr. Allen explained that it was a special case stated by the magistrates of Glamorganshire, and the short point was whether a tin of condensed milk was sufficiently marked under Section 9 of the Food and Drugs Act. It appeared that on the 20th of December, 1892, the appellant went to the shop of the respondent and asked for a tin of condensed milk. He was given one, and paid 4d. for it. At the time of the purchase the attention of the appellant was not called to any label on the tin. Upon it on one side were the words "Condensed Milk, Swiss Dairy Brand." There was nothing to show it was skimmed milk, unless the purchaser read the label on the other side. One point was whether, when a tin of condensed milk like that in question was sold without attention being called to the fact that it was skimmed, the purchaser was bound to read the whole label? Mr. Justice Day: I should think he is bound to read nothing at all. Mr. Allen: Is he bound to read the label? Mr. Justice Day: If he takes the trouble to read he will see he is buying a tin of skimmed milk. How can you call this an alteration within the section? Mr. Paul: The article of food is milk. Mr. Justice Day: Skimmed milk. Mr. Allen: Skimmed milk is not an article of food. Mr. Justice Day: Not an article of food? It is very largely used in some places. I wish it were more largely used. I do not hesitate to say, speaking from experience, that skimmed milk is used by man. Mr. Allen: So is milk. New milk is an article of food. Mr. Justice Day: So is skimmed milk. Mr. Allen: It does not affect my argument. Mr. Justice Lawrence: You say they have sold something which has been adulterated. Mr. Allen: No. Mr. Justice Lawrence: Or rather, something which has been altered from which the valuable constituents have been taken out. Mr. Justice Day: You say they have sold milk after taking the cream off. Mr. Allen: I say they have taken something away from the article of food and sold something else without disclosing it.

Mr. Justice Lawrence: Anyone who knows anything about milk will know there is no cream in this. Mr. Justice Day: You must not sell new milk skimmed, I quite agree; but this professes to be milk that has been skimmed and therefore it is not new milk. Mr. Allen: Of course if it is assumed against me that this is a good disclosure I have nothing more to say. Mr. Justice Day: The first thing I see is that this is skimmed milk. You should have sent it up with the other side round first. (Laughter.) Mr. Justice Lawrence: The man has done what everybody is bound to do now—put on the outside what the thing really is. Mr. Allen: I say you are bound to call the attention of the purchaser to the fact that it is skimmed milk you are selling. Mr. Justice Day: How are you to do it? A grocer cannot keep a person calling out a description of all his goods. He puts a label on them. Mr. Justice Lawrence: Under the Margarine Acts they do not have a man to keep on saying. "This is not butter, this is margarine." (Laughter.) It is sufficient to put on a label. You agree it would be all right if he put "Condensed Skimmed Milk." Mr. Allen: Certainly. Mr. Justice Day: That is just what has been done. He says this is skimmed milk, what more can he do? Mr. Allen: He might do what Mr. Justice Lawrence has suggested, put on "Condensed skimmed milk." Mr. Allen: Supposing they sell hock, and it was labelled hock, but on the back they put on "Made in England." (Laughter.) Mr. Justice Day: When that case comes before us, perhaps we shall have to determine it. Mr. Justice Lawrence: There is a good deal of wine which does not disclose its nature until the next morning. (Laughter.) Mr. Allen: This milk was intended for an article of food. They did not mean it to be used for polishing furniture, but for household purposes. The evidence was that infants would pine away, get rickets and die, if fed on skimmed milk. It was stated that rickets was very largely brought on by drinking this condensed milk. Mr. Justice Day: Then I should think people had better give more than 4d. for infants food. If the evidence is that children fed on condensed skimmed milk often get rickets, does that bring the case within the Act of Parliament? Mr. Allen: The words of the section are, he must "make disclosure of the alteration." Mr. Justice Day:

He has done so in the strictest possible terms. He has stated what the alteration is, it being the skimming of the milk, and anyone would know that means the cream is gone. Mr. Allen: Surely if a person buys condensed milk, it means milk which has been condensed or pressed in a certain way, so that you get something possibly better than ordinary milk. There are cases about the marking of railway tickets on the back. Mr. Justice Day: Those are different cases. Mr. Grain said he should only submit that the decision of the magistrates ought to be affirmed. Mr. Justice Day: Clearly this appeal must be dismissed. The magistrates had acted with very great discretion in refusing to convict a person for selling the very thing which has been put before us, namely, skimmed milk, which was what he said he was selling. Mr. Justice Lawrence concurred. Appeal dismissed with costs.

We understand that an appeal is about to be made against Mr. Littler's decision, which we recorded last week. Truly we live in a queer age, when the law will not convict unless rotten meat be exposed by hanging up, and when the science of microscopic disclosure evokes judicial admiration. It was not so of old. In the *Assisa Panis*, for example, as set forth in *Liber Albus*, there are not only the strictest regulations concerning the manner in which trade was to be conducted, but there are also penalties for failing in the same. "If any default," it says, "shall be found in the bread of a baker in the City, the first time let him be drawn upon a hurdle from the Guildhall to his own house through the great streets where there be most people assembled; and through the great streets which are most dirty, with the faulty loaf hanging about his neck. If a second time he shall be found committing the same offence, let him be drawn from the Guildhall through the great street of Chepe in manner aforesaid, to the pillory, and remain there at least one hour in the day; and the third time that such default shall be found, he shall be drawn, and the oven shall be pulled down, and the baker made to forswear the trade within the City for ever." It further tells us that William de Stratford suffered this punishment for selling bread of short weight; and John de Strode "for making bread of filth and cobwebs." One hoary-headed offender was excused the hurdle on account of his age and the severity of the season; and it would seem that the last time this punishment was inflicted was in the sixteenth year of the reign of Henry VI., when Simon Frensshe was so drawn.

A like punishment was awarded to butchers and vintners for fraudulent dealings; for we are told that a butcher was paraded through the streets with his face to the horse's tail, for selling measly bacon at market, and that the next day he was set in the pillory with two great pieces of his measly bacon over his head, and a writing which set forth his crimes. Now-a-days our judges set the Inspector in the pillory, and pelt those who strive to protect the public with inane insulting would-be witticisms.

MILK SWINDLES.

OUR MAGISTRATES: THE RT HON. H. H. FOWLER: & SOMERSET HOUSE.

RIDICULOUS FINE, No. 1.

At Southampton on the 27th ult., Jane Collins, New-road, was summoned for having sold milk from which 20 per cent. of the cream was abstracted. Mr. A. W. Pearce, Deputy Town Clerk, appeared in support of the information, and defendant was ordered to pay a penalty of 10s. and costs, 11s. 6d.

RIDICULOUS FINE, No. 2.

At Castleisland Petty Sessions on the 25th, before Capt. Keogh, R.M., Messrs. S. M. Hussey, and R. Roche, James White, a farmer, residing at Ballinard, was charged by Sergeant Shea with having sent for sale to the Castleisland creamery milk, for sale as new milk, from which was abstracted 60 per cent. of fat or cream. The Sergeant gave evidence of taking samples of the milk from the daughter of the defendant. He handed in the certificate of Sir Charles Cameron, Public Analyst, who stated there was more than 60 per cent. of butter or cream abstracted from the milk by skimming or otherwise. It was, in fact, ordinary skim milk. Mr. J. H. O'Connor, proprietor of the local creamery, stated that the defendant had on several occasions sent milk to the creamery which was greatly deteriorated. The Sergeant said that there was a general outcry against the bad quality of the butter sold in the country, and especially mentioned Castleisland. Captain Keogh said that the Listowel butter was the best in the country, and the people appeared to be honest there. A fine of 40s. and costs was imposed. Mr. Leary, solicitor appeared for the defence.

Farcical fines such as this are no deterrent whatever against fraud, and there is no ground for wonder that foreign dairy produce monopolises our markets when magistrates thus practically encourage farmers to swindle and injure the creamery companies. A very few churns of skimmed milk would reconquer this small fine. The Act allows higher penalties, and it is astonishing that magistrates refuse to enforce them and protect the public and native industries.

RIDICULOUS FINE, No. 3.

David Raysbrook, of Bybrook, Ashford, was summoned for selling milk from which half the original fat had been abstracted on April 26. P.C. Saunders proved purchasing the milk, and Supt. Wenham

produced the Analyst's certificate, which showed that half the cream had been abstracted from the sample. Defendant was fined £3 and 11s. costs, and was allowed a month for payment. Defendant made a complaint to the Bench with reference to Supt. Wenham having forced him to give him a sample of his milk a year ago, the Supt. Wenham stating that by refusing to serve him with a sample, defendant was liable to fine of £10, and he forced him to give him a sample in order to save himself from prosecution.

THE LACTOMETER TEST AGAIN.

At Folkestone, on the 24th ult., Mr. William Aird, was summoned for selling milk adulterated with 20 per cent. of water. Mr. Haines, solicitor, prosecuted; and Mr. Worsfold Mowll defended. Mr. John Pierson, Borough Inspector, proved purchasing on May 11th of a youth named Meerow, in Mr. Aird's employ, one pint of milk, which Meerow was delivering in South-street. Mr. Pierson produced the Analyst's certificate, to the effect that 20 per cent. of water had been added to the milk. A sample obtained from another of Mr. Aird's men gave 15 per cent. of added water; while a third sample, obtained from another man proved to be pure milk.—Mr. Mowll wished the lactometer test to be applied to the milk; but the Bench held that that test was uncertain.—Mr. Aird deposed that he guaranteed that the milk he sent out should be pure, and he described how greatly milk from different cows varied.—Frederick Baker, his foreman, Percy Southon, and William Burgess, two of his men, and George Meerow, the youth who carried out the milk, all gave testimony which went to show that the milk was sold as it was drawn from the cow, and that no water was added. The Bench, however, said they could not go behind the analyst's certificate, and they imposed a fine of 50s. with 25s. costs.

MR. BIRON'S RIDICULOUS FINES AGAIN.

Wm. Brown, who trades as the Farmers' Direct Supply Company, at South grove, Bow, was summoned at Lambeth before Mr. Biron, by Inspector Eagle, on behalf of the Camberwell Vestry, for selling milk from which at least 16 per cent. of its original fat had been abstracted.—Mr. Philcox, who defended, remarked that the poorness of the grass and the drought had had a marked effect upon milk. He was told that in some cases it made a difference of 20 per cent.—Mr. Marsden, who appeared in support of the summons, asked his lordship to inflict a substantial fine. The vestry had had the greatest trouble with the defendant, who had been fined in all parts of the Metropolis. Mr. Biron ordered the defendant to pay a fine of £5 and £5 costs.

Will some member of Parliament bring these shameful instances of inadequate fines before the notice of the Government? Here is a vendor, who, as our columns have for months shown, violates the law throughout the Metropolis with impunity. He has been convicted again and again, but whilst magisterial incapables refuse to inflict adequate penalties, it would absolutely pay him to practice adulteration and risk prosecutions, for the reason that as a prosecution only occurs once in a few months, and ten pounds represents the entire penalty, the profit made between prosecutions must amount in the case of a vendor doing a large business to some hundreds of pounds. Magistrates like Mr. Biron are about the very worst enemies the public or the unfortunate country that suffers from their decisions could have, for their incapacity to realise the injury done to native agricultural interests means millions per year lost to farmers.

SIMILAR MAGISTERIAL FOLLY EXISTS AT COLERAINE.

At the Petty Sessions, Sergeant Love summoned Rachel M'Conaghie, Gateshead, with selling butter-milk adulterated with water.

Sergeant Love said he purchased 3 pints of butter-milk from O'Neill, a sample of which he sent to Professor Leeboddy, analyst, Derry. He read the certificate (produced), which showed that the milk had been adulterated with 10 per cent. more water than was necessary for the process of churning. The sergeant also read a letter from Professor Leeboddy, which stated that the milk contained 20 per cent. of added water, and that the vendor would be prosecuted for the sale of such milk in Derry. The charge was brought under section 6 of 38 and 39 Vic., chap. 3.

Their Worships fined the defendant 10s. and costs.

We would like the names of these Nupkinses of Coleraine.

BRENTFORD MAGISTRATES PROTECT FRAUD UPON THE PUBLIC.

The Brentford Petty Sessions bench, another typical one, is adorned by a Full-Blown-General named Tremenheere, a Sir G. S. Measom, and one or two commonplace persons who are evidently qualified for seats on the bench, and for the companionship of the F.B.G. and the Sir, by possessing the ability to acquiesce in any decision no matter how farcical it may be.

At the Petty Sessions on May 20th, before General Tremenheere, Mr. G. G. Mackintosh, Sir G. S. Measom, Mr. G. J. Carver, and Mr. H. Barber, Emanuel Kite, 2, Osborne-road, Hounslow, milkman, was summoned by Inspector Tyler for having sold milk which the analyst certified to be adulterated with 5 per cent. of added water. The defendant said he got no warranty with his milk. The case having been proved and the certificate of the Public Analyst handed in, a fine of 2s. 6d. with costs was inflicted.

Mr. Emanuel Kite will be much more foolish than we take him to be, if he cannot gather from this decision that milk adulteration is safeguarded by Brentford magistrates. But the Brentford magistrates have not got a monopoly of stupidity or incapacity.

Chase Terrace can match them by

THIRTY-TWO PER CENT. OF WATER AND £1 FINE.

At Chase Terrace on the 25th ult., William Westley, milk seller, was summoned for selling milk adulterated with 32 per cent. of water on April 10th. Mr. Morris said that in consequence of complaints made, special assistants were sent to Chase Terrace on April 10th, who purchased half a pint of milk from defendant at the rate of 4d. a quart. A sample was sent to the Public Analyst and was found to contain 32 per cent. of added water. William Grasson and Samuel Toy gave evidence in support of the charge, and defendant was fined £1 and costs.

CHESTER AND 40s. FINES FOR 20% ADULTERATION.

Chester is very little better, as shown in a case tried on May 27th.

At the Chester Castle Petty Sessions, Mary and Emma Johnson, Sunny Bank, Hoole, were summoned for selling adulterated milk. Inspector Hallard said he found Mary Johnson hawking milk in Hoole, and obtained a quantity of the milk, which was forwarded to the County Analyst, who had certified that it was adulterated with 20 per cent. of water.—The defendant, who said she had been selling milk for the last thirteen years, emphatically denied that she had added water to the milk. At the time the first sample was taken the cows were being fed on brewer's grains, turnips, &c., and two of them caught cold. In the meantime, between the Inspector's visits to the farm, they were given corn to eat, and the second and richer sample contained the drippings of two of the cows.—Mr. J. Storrar, R.C.V.S., said he had made a speciality of the study of cows, but could not give the exact Somerset standard of the quality of milk.—Mr. Giles (who defended): Is it possible milk may vary in purity according to the food given to the cow?—Yes, that is very well understood.—What food, in your opinion, is likely to create a larger quantity of water than any other?—Brewer's grains will have the effect of giving a larger quantity of poorer milk. Turnips are also a watery food, and have a good effect for giving quantity.—The Chairman: Would you expect 20 per cent. of water from cows kept on such food?—Witness: That would be a very extreme case.—Mr. Giles: But would it be altogether out of the question?—Witness: If the cows were rather poor, I think it would be possible.—The magistrates considered the case proved, and fined the defendants 40s. and costs.

This persistent encouragement of fraud runs even to the robbery of the poor, helpless pauper, as seen in the case of

BETHNAL-GREEN AND ITS WORKHOUSE MILK.

An epidemic of skin disease having broken out in Bethnal-green Workhouse, a special meeting of the Board of Guardians was held, to consider the report of an analysis by Dr. Knox of a sample of milk taken from a quantity supplied to the establishment, from which source it is supposed the disease has its origin. The Officer stated that the milk was sour, contained 60 per cent. of added water, and had been deprived of 30 per cent. of cream, while a quantity of borax had been added as a preservative. It was the worst sample he had ever seen. Mr. Barnard remarked that it was a cruel and shameful imposition for a contractor to send such stuff to a sick institution, especially as it was mostly for babies.—The contractor, who was called into the Board-room, averred his innocence of criminality, and stated that in consequence of his ordinary supplies failing, he was obliged to purchase extra milk, from which he alleged the workhouse was supplied on the occasion in question.—Mr. Bedford moved that the contractor be severely censured by the chairman, but withdrew his proposition on its being pointed out that the analysis was taken in such a manner as to preclude the Board from prosecuting. They, however, resolved to engage an Analytical Chemist to submit samples of the milk supplied not less than 50 times a year, and further instructed the Medical Officer to forward samples as frequently as he deemed desirable.

Yet with these shameful evidences of free fraud encouragement before us, what do we find agriculturists doing? *The Quarterly Review* in "How to save the Farmer," stirring exerts them to "determine to protect themselves from dishonest competition caused by the sale of foreign goods as their own English products; to put every power of the Merchandise Marks Acts in force; and if those Acts are insufficient for the purpose, let them go to Parliament and insist on legislation which shall give them fair play and justice." But says not one word of the magisterial protection of the fraud; of the Somerset House thievery encouraging standards, or of the fact that the Somerset House analytical department have done more damage to English agriculture than all the competition it has met, because Somerset House referees under the Food and Drugs Acts, by their incompetence and fraud encouraging standards have made it well nigh impossible for the law to touch dishonest foreign competition. At the bottom of Agricultural depression is this question of Free Fraud, Somerset House incompetence and magisterial encouragement to knavery. More foolish still are the Royal Agricultural Society who meet and say not one word about it. The Central and Associated Chambers of Agriculture cursorily refer to it and do nothing to remedy the gigantic evil; and, most shameful of all, the

PRESIDENT OF THE BOARD OF TRADE SHIELDS FREE FRAUD.

In the House of Commons on the 30th ult., Lord G. Hamilton asked the President of the Local Government Board if his attention had been directed to a paragraph in a letter addressed to Dr. Bell, the Principal of the Inland Revenue Laboratory, Somerset House, by the Society of Public Analysts, in September, 1892, and signed by 119 members of the society, including nearly all the public analysts in the United Kingdom, in which they stated that they had long observed with regret the practice of certifying, in a manner liable to be interpreted by the Court as definite, on samples of milk which had been kept for a considerable time, and, which, therefore, when examined, must have been in such a condition as to preclude any trustworthy opinion being formed respecting their original composition, also, that the formation of any reliable opinion is in a great many cases impossible under such circumstances, owing to the very irregular character of the changes milk undergoes in keeping, and therefore expressed a hope that in future it would be clearly stated in all certificates that, owing to decomposition, it was impossible to obtain analytical results comparable in point of accuracy with those yielded by the milk when it was fresh; and whether there was any objection to directions being given to Dr. Bell to comply with this request, especially if the practice complained of had led in many instances to failure of justice.

Mr. H. Fowler.—I have been in communication with the Board of Inland Revenue on the subject of the question, and I am informed that the statements contained in the paragraph cited must not be accepted as representing the facts connected with the analysis of milks referred to Somerset House by directions of the magistrates. No analysis of a sample is undertaken if found in a condition which does not allow of a trustworthy opinion being formed respecting its original composition, and there are no valid grounds whatever for believing that any instances of failure of justice have arisen through the evidence contained in the certificates of analysis furnished to magistrates, under the Sale of Food and Drugs Acts, by the chemical officers of the Board of Inland Revenue. In this connection it may be observed with respect to the samples of milk referred to by the justices in disputed cases, and analysed during the year ended March 31, 1893, that of 26 alleged to contain added water, in only two instances did the Somerset House analysts come to the conclusion that no water had been added, and that of 12 samples alleged to have been deficient in fat or cream, in only one instance were they of opinion that the fat was not deficient.

Anything more stupid than Mr. Henry Fowler's action it would be hard to imagine. The Local Government Board subscribe to this journal. Now if Mr. Henry Fowler had referred to his file he would find cases innumerable of "valid grounds for believing that failures of justice had arisen through the incapacity of the Chemical Department at Somerset House." The MIDDLESEX COUNTY COUNCIL COMPLAINED OF SOMERSET HOUSE, and such a failure of justice at their last meeting (*vide pp. 144, FOOD AND SANITATION, June 3rd.*) On May 27th we exhaustively examined Dr. Bell's published milk analyses, and showed that they were unscientific, worthless, and misleading, to the extent of error so colossal as to appear well nigh incredible were it not proved beyond doubt. What arrant, ignorant rubbish, therefore, is this twaddle of the President of the Local Government Board! Did he expect that the Board of Inland Revenue would confess that it was incompetent to act as the referee under the Sale of Food and Drugs Acts? If Mr. Fowler wished to give a correct, or an honest answer, he ought to have enquired of the Society of Public Analysts, of Vestry Clerks, and Food and Drugs Inspectors, and he could have had overwhelming evidence of failures of justice. But Mr. Fowler prefers apparently the idler and easier course. It is pitiable to see a responsible minister, a Strasbourg goose, crammed by a discredited department to the injury of English industries. If this is the best the President of the Local Government Board is capable of, we would in all seriousness ask—What is the matter with an Edison phonograph? It would speak its untrue parrot answers quite as well as Mr. Fowler does, and would not cost £2,000 per year for being an automatic machine, which is apparently all Mr. Fowler is.

A FOOD INSPECTOR NEEDED AT ECKINGTON.—At the meeting of the Chesterfield Rural Sanitary Authority on Saturday at the Union Workhouse, Mr. Rotherham, Eckington, in accordance with his notice of motion, proposed that an Inspector of Food offered for sale in markets and other places in Eckington be appointed at a salary of £20 per year, adding, hawkers had taken food in an awful condition into the parish. Mr. G. Shaw (the Clerk) inquired if the appointment was to relate to Eckington alone, as in that case, and that parish paid for the services of the Inspector, a special order would have to be applied for to the Local Government Board. Mr. Rotherham replied such was his intention. Mr. J. F. Swallow, J.P., seconded the resolution, and said a lot of filth from Sheffield was disposed of at Eckington. Some of the food was so bad that hawkers threw it away on the roadside if they could not sell it. It was agreed to make application to the Local Government Board for the necessary permission.

THE VINEGAR IMPOSTURES.

At Hanley, on the 5th inst., before Messrs. H. Wright (Stipendiary) and W. D. Spanton—Elizabeth Longshaw, shopkeeper, Gold-nhill, was summoned by Mr. Knight (Inspector under the Food and Drugs Act) for selling as vinegar an article which the County Analyst stated in his certificate was not genuine or legitimate vinegar, but simply diluted and coloured pyroligneous acid. At the request of Mr. Richardson, who appeared for the defence, Mr. E. W. T. Jones, of Wolverhampton (the County Analyst), was called as a witness, and stated that he described the article as pyroligneous acid because it had been obtained from the destructive distillation of wood. If he had called it acetic acid, that would have been correct chemically, but it would not have indicated its origin. It had none of the characters of acetic acid obtained from another source, such as the acetous fermentation of grain. It was possible to manipulate pyroligneous acid by distillation to such an extent as to prevent its source being designated; but the process would be too costly to admit of the article being used in commerce. By the Stipendiary: Genuine vinegar was produced from the acetous fermentation of grain, but in the sample in question all the characters associated with acetic acid produced from grain were absent. It was undoubtedly acid produced from wood, and not from grain.—For the defence, Mr. Richardson said that, according to the *Materia Medica*, vinegar might be obtained from a variety of substances, and varied in its quality according to its source. The questions to be decided in this case, he submitted, were (1) whether or not the article was a compound, and (2) whether or not that compounded article was a recognised article of commerce. With regard to the latter question he contended that for fifty years past the manufacture of vinegar from pyroligneous acid had been recognised by various enactments. Having received statutable recognition as an article of commerce, he contended that it came within the exception clauses of the 6th Section of the Food and Drugs Act.—The Stipendiary said this vinegar might be a recognised article of commerce amongst certain persons, but the Act quoted by Mr. Richardson did not affect the question they had to decide.—Mr. Harry Grimshaw, analytical chemist, Manchester, stated that he had analysed a sample of this vinegar, and found that the acetic acid which it contained was not what was technically known as pyroligneous acid. He had known the vinegar made from pyroligneous acid as an article of commerce for at least eight or ten years.—By the Court: He should call this acid vinegar, or wood vinegar, but did not think either adjective necessary. The sample he had analysed was not made from malt, but he could not say from what other source the acetic acid came by any tests he had made.—The Stipendiary said the magistrates had no doubt that defendant sold as vinegar an article which was not vinegar, and therefore the purchaser did not get what he asked for. The defendant, being in poor circumstances, would be simply fined 20s. and costs. £3 1s. 6d. altogether.—Mr. Richardson asked for a case, but the Stipendiary intimated that he must exercise his right to appeal.

David Parkinson Norton, of the White Hart Inn, Hanley, was charged, at the instance of the Town Council, with selling as vinegar an article which the Borough Analyst certified did not contain more than 10 per cent. of real vinegar, the rest being coloured acetic acid. This case was before the court several weeks ago, when it was adjourned for an independent analysis to be made by the authorities at Somerset House. The result of this analysis did not transpire, Mr. Richardson, who appeared for the defendant, stating that he could not carry the case any further if the acetic acid was taken to be pyroligneous acid.—The Stipendiary said it could not be held in this case that the matter was new to the defendant, because it had been proved to and recognised by the Court that the defendant was the wholesale dealer who had supplied this vinegar to other persons who had been brought before them from time to time for retailing it. It had further been given in evidence that he had told other defendants that he was willing to pay the fines and costs inflicted upon them. It was thus evident that the defendant had been making exceedingly large profits out of this course of trading, by which he was actually defrauding the public of their due. They had not got to the bottom of those profits yet, and, as in the last two cases—in which the defendant's name appeared as standing behind the persons summoned—they imposed the full penalty, they could not do less in this case than inflict the full penalty, of £20 and costs, which was the limit, unfortunately.

Isiah Walford, grocer, Lower M^yer-street, Hanley, pleaded guilty to selling as vinegar an article certified by the Analyst to be diluted and coloured acetic, or pyroligneous acid. It was stated that the cask from which the article was supplied bore the words, "D. P. Norton, licensed brewer of malt vinegar. Warranted pure." Mr. Richardson said it must not be taken that Norton would pay the fine in this case.—The Stipendiary: Have I found the bottom of the profits then? (Laughter.) The defendant was said to be in poor circumstances, and he was fined 20s. and 12s. 6d. costs.—Thomas Boon, grocer, Russell-street, Shelton, who was charged with a similar offence, and who said that he sold the article as supplied to him by the wholesale dealer, was fined £2 and 1s. 6d. costs.—Mr. A. Challinor (Town Clerk) prosecuted in the three last cases.

Mr. H. Treherne Wiggs, the energetic officer who is entrusted by the Lambeth Vestry with the enforcing of the provisions of the Food and Drugs Act in Lambeth, and is also charged with the duty of abating the smoke nuisance, has just obtained the certificate of the Sanitary Institute.

THE WARRANTY QUESTION.

THE SOUTH DERBYSHIRE FOOD AND DRUGS ACT INSPECTOR SUCCESSFULLY PROSECUTES THE WHOLESALE DEALER.

At Swadlincote, in April, Capt. Sandys, Inspector Food and Drugs Act, for South Derbyshire, prosecuted Joseph Dennis, shopkeeper, of Measham, for selling adulterated butter, the offence being alleged to have been committed in the month of December, 1892.—Mr. Mears appeared for the defence, and in a preliminary speech said that in this case he did not intend to dispute the accuracy of the analysis, but he should submit evidence to prove that his client had bought the article in question honestly believing it to be Danish butter, and that all the requirements of that section of the Act under which these proceedings had been taken had been fulfilled, as defendant had an invoice and warranty with the article.—Capt. Sandys deposed that on December 15th he visited defendant's shop and purchased 1lb. of an article purporting to be butter, and not marked in any way to show it was not such. He subsequently made the required provisions as to the taking of an analysis, from which it appeared that the substance contained 88 parts of margarine and 12 of butter. He had since received a notice from the solicitor for the defence stating that he would rely on the written invoice.—Cross-examined by Mr. Mears: He did not have any conversation as to the constitution of the butter.—Mrs. Dennis (wife of the defendant) deposed that she carried on the grocery business, and to have been in the habit of dealing with Mr. G. H. Timms, of Ashby. She remembered giving an order for butter to Mr. Timms' assistant in November. It was for Danish butter, and she had a dozen pounds. She paid 1s. 3d. per pound, and generally sold it out at 1s. 4d. The bill for the butter now produced was the one alluding to the article in question. She had no reason to believe that it was anything but pure butter, and it was sold in the same state as it was bought. She had not sold anything in the nature of margarine for over four years.—Cross-examined: She paid for the butter before the summons was taken out.—John Thomas Mays, assistant to Mr. Timms, corroborated the evidence of Mrs. Dennis as to the purchase of the butter, and stated that from the invoice produced Mrs. Dennis would be fully justified in expecting the best Danish butter. He could not account for any mistake that might have been made, by which any other article had been supplied.—In answer to Capt. Sandys, witness could not say who made up Mrs. Dennis' parcel.—Mrs. Dennis, recalled, said that she had bought the best milk butter of the dealers as well as the Danish butter.—Mr. Mays, recalled, admitted that the butter in question was sent to Mrs. Dennis in mistake for what she bargained for.—The Bench thought that there was too much doubt in the case to justify them in convicting, and the case would be dismissed.

Captain Sandys wisely resolved not to let the question rest at that point, but proceeded against the wholesale dealer, with the following result:—

George Hudson Timms, grocer, Ashby, was summoned at the Swadlincote Petty Sessions on May 30th, by Captain Sandys, Inspector under the Food and Drugs Act for South Derbyshire, for an offence against the Margarine Act committed on the 29th of last November. Mr. Musson appeared for the prosecution, and Mr. Mears defended. Mr. Musson briefly recapitulated the facts, and then proceeded to call Matildo Dennis, provision dealer, of Measham, who deposed that on the day in question the defendant's assistant came to her shop for orders. She ordered several articles from him, amongst which was some Danish butter, which he strongly recommended, and for which she was to pay 1s. 3d. per pound. She ordered half-a-dozen pounds, but he sent her a dozen pounds. It was wrapped up in muslin in quantities of one pound. The assistant made an entry of the order in his book. On the 15th of December she went to Burton, leaving her husband in the house. There was some of the butter she had bought from defendant in the shop. On her return her husband showed her some of this butter, from which a piece had been cut off. Joseph Dennis, husband of the last witness, deposed to the visit of Captain Sandys. The officer bought some of the butter that had been purchased from Mr. Timms, and divided it into four parts. Cross-examined by Mr. Mears: He had been repaid by Mr. Timms the whole of the costs of a recent prosecution taken up at the instance of Captain Sandys for selling margarine as Danish butter. Captain Sandys repeated the evidence he gave at the last court as to the purchase of the butter from Dennis, and the result of the analysis. John Thomas Mays, defendant's assistant, corroborated the evidence of the Dennis's as to the order given. Cross-examined: His master's instructions were that no kind of butter should be sent out without its name being distinctly affixed to it. The only way in which he could account for the mistake was that his order had been misread for "Danks," a name by which the firm designated margarine. Mr. Mears contended what the prosecution had to prove was that Mrs. Dennis had ordered a compound article, whereas, according to their own witness (Mays) pure butter—which was not a compound at all—had been ordered. Upon the merits of the case he submitted it to the Bench that the margarine was sent to Dennis's shop by a pure accident, and that there was no intention of fraud. The Bench, taking the view advanced by the defendant's solicitor, and believing there was no fraudulent intention, imposed a nominal penalty of £1 and costs, but advised Mr. Timms to be more careful in the future.

Our readers will see that this is a record making case in the working of the Food and Drugs Act; important to all concerned with the protection of the public from fraud in food stuffs and of native agricultural prosperity. It is an encouraging instance of increased activity and thoroughness in suppressing fraud and giving English dairy-farming a chance, and we hope

this successful prosecution of the wholesale dealer will not be allowed to long remain an isolated case. The "warranty" swindle in London robs the public and dairy farmers of hundreds of thousands of pounds per year, and Captain Sandys has done a genuine public service in grappling with it successfully in South Derbyshire.

A WELSH SOLOMON.

Some months ago we commented on a Scotch Sheriff, and said, "If such fearful assaulters of sense and law must tread the earth, it is a matter demanding grave consideration whether they should sit on the Bench to the public detriment, or do society a service by consenting to be properly and conscientiously stuffed." Of Scotch Sheriffs we know but little personally, but our opinion that some of them are doing any public service by avoiding the attentions of a skilled taxidermist remains unchanged. But the Scotch Sheriff had better look to his laurels, for Wales has a magistrate who runs him close, and strangely enough this magistrate is either a clergyman or a medical man. We hope for the credit of the medical profession that he belongs to the church. This gentleman's exploit is thus chronicled in the *South Wales Gazette*, May 19th:—

At Brynmawr Police Court, George Phipps, King-street, Brynmawr, was charged with selling milk not of the nature and substance demanded.—Mr. T. G. Powell defended.—P.C. Jones deposed that on Tuesday Morning, 11th April, he went to defendant's shop and asked for a pint of fresh milk, for which he paid 2d. He then called in the inspector and handed the milk over to him.—Inspector John Williams, said he returned to the house with P.C. Jones and divided the milk into three parts, sealing each bottle and marking it "Milk No. 5." He then informed defendant he (the Inspector) would keep one, give him the other, and the third would be forwarded to the public analyst, who had since reported as follows:—"One hundred parts of the above sample contained 91 parts genuine standard milk, and 9 parts water mixed therewith; in other words, the sample contained 9 per cent. extraneous or added water."—The Bench considered the analysis incomplete.—Mr. Powell submitted that on three different grounds the case must be dismissed. Defendant had been summoned under 35 and 39 Victoria, but the section did not apply, and they could not summon under one section to prove another.—Dr. Browne (interposing) did not think it necessary to go further, inasmuch as there was no proper analysis before the Court. It showed no clear statement of the facts.—The case was therefore dismissed.

Eleazer Davies, Twynblaennant, was also summoned for a like offence on the 11th April, and stated that the milk was bought by him to retail.—John Williams, Inspector for the County of Brecon, deposed that on the date in question he purchased a sample of fresh milk from Alice Davies, in defendant's employ, and sent a sample to the public analyst.—The Bench desired to see the analysis, which was the same as that presented in the last case. Dr. Browne, while agreeing that it was of the greatest importance such prosecutions should be made, said it was equally important that proper analysis should be sent. He should be sorry to convict on such an analysis as that before the Court, which gave no statement as to the component parts of the milk submitted for analysis.—The case was dismissed.

DISEASED MEAT PROSECUTION.

At Dublin on June 1st, Denis Cogan, 115, Thomas-street, was summoned by Food Inspector Halligan for selling meat unfit for human food to Eliza Ryder. The latter was examined, and deposed that on the Saturday before Whit Sunday she bought 1½lb. of a ham shank at defendant's premises for 3s. When she cooked part of it on Sunday she found it was bad, and her sister threw it out. Next day, by advice of her husband, she took the cooked part back to Mr. Cogan's, but the assistant refused to make her any allowance, and on the following day she took it to the Corporation.

Inspector Halligan deposed that the meat was given to him by the last witness. He thought it was bad, and gave it to Sir Charles Cameron.

Sir Charles Cameron said that he examined the ham, which was in a decomposing state and unfit for human food. He believed it had been imperfectly cured, and was not an old ham. It was the thin end of the ham, with about half-a-pound of meat attached to it.

Mr. Cogan said that he bought the ham in the ordinary way, and paid the full price for it. He did not sell the ham himself. Had he been on the premises when the woman called, he would have given her back the price of the ham, and he was ready to compensate her now.

Mr. Swift imposed a fine of £2.

PUBLIC HEALTH PROSECUTION.

INSANITARY DWELLINGS.

At Southwark, on the 25th ult., Mr. J. Wallis, of Stanley House, Mount Pleasant-terrace, Lewisham, was summoned, before Mr. Slade, for failing to comply with a notice to abate a nuisance at No. 1, Belall-street, Southwark, of which premises he was the owner.—The defendant contended that the repairs should be done by the tenant, but this plea was not accepted, and he was fined £5 and costs.

ADULTERATION PROSECUTIONS.

MILK.

At Southwark, on the 2nd inst., Henry Hanson, New Yard, Great Queen-street, appeared to a summons taken out at the instance of Inspector Ashdown, Inspector under the Food and Drugs Act for St. Olaves' district, charging him with selling milk containing 9 per cent. of added water. Thomas Ashdown said that on May 11th he met one of the men employed by defendant, who was at the entrance of Tanner-street Workhouse, and purchased a pint of milk. The certificate showed that the article contained nine per cent. of added water. Mr. Ricketts, who defended, said his client relied on a warranty, which he received from the wholesale farmer. The defendant said he purchased his milk from a farmer in Staffordshire, and every churn carried a warranty with it. Unfortunately witness had torn up the warranty on the churn from which the Inspector received the milk. He was contractor to the workhouse, and had dealt with the farmer in question for some years. Defendant's foreman deposed to bringing the milk from the station to defendant's shop, and said that the two churns contained the usual warranty. He delivered the churns to William Shaw, who removed it to the workhouse. William Shaw said he took the milk to the workhouse, and never opened the churns till he got there. Mr. Slade dismissed the summons, and instructed the inspector to proceed against the farmer.

At West Hartlepool, on the 17th ult., John White, Seaton Carew, was charged with selling milk containing a deficiency of natural fat. Mr. Stover appeared for the defence. Mr. T. Wheat, Sanitary Inspector, stated that the milk contained a deficiency of natural fat to the extent of 9.7 per cent. Mr. Stover, in defence, said if the milk had been tampered with, it had been done without the knowledge or consent of the defendant. A fine of 40s. and costs (7s.) was imposed.

William Buck was charged with adulterating his milk with water. The Analyst's report stated that the sample of milk contained five per cent. of added water. Defendant said he had bought the milk from a farmer, and sold it just as he got it. Fined 40s. and costs (7s.), or fourteen days.

COCOA.

At Ystrad Police-court on the 29th ult., before Mr. J. Ignatius Williams, Stipendiary, Mr. T. P. Jenkins, and Mr. Alderman Morgan, a grocer named Thomas Jones, carrying on business at Pentre, was summoned by Superintendent Evan Jones, charged with selling adulterated cocoa. The evidence went to prove that in December last Superintendent Jones purchased a packet of "Pearl" cocoa from defendant, which, on being analysed, was found to contain 30 per cent. of pure cocoa and 70 per cent. of added starch and sugar. Defendant, on being called upon to give evidence, stated that he had sold this cocoa for a number of years, and there was a great demand for it, inasmuch as it was a cheap article, and one which suited the working classes. Mr. Henry Deacon, manager of Messrs. Fry and Sons' Works, deposed that the sago (analytically termed starch) and the sugar were added to make the cocoa more soluble, and added that less profit was made from this article than from the pure cocoa. A fine of 1s. and costs was inflicted, whereupon Mr. Cross applied for leave to appeal to the court of quarter sessions. This was granted on the deposit of £50 as a guarantee.—W. Howells (Ferndale) and Lot Williams (Ton Ystrad) were mulcted in similar sums for selling "Pearl" cocoa which contained respectively 75 and 80 per cent. of added starch (sago) and sugar.

At the Kineton Petty Sessions, on the 1st inst., before the Rev. W. S. Miller (chairman), Mr. T. A. Perry, and Mr. Bolton King, Priscilla Watts, grocer, of Pilleston Priors, was summoned for selling to Frederick George Bennett, Inspector under the Food and Drugs Act, 1875, a quarter of a pound of cocoa which was not of the nature required. Mr. C. Humphries, from the office of the Warwickshire County Council, prosecuted, and Mr. H. Cross, of Bristol (instructed by Messrs. Fry and Sons, the manufacturers of the cocoa), defended. —In opening the case, Mr. Humphries submitted that the case was one of fraudulent intention under the meaning of the Act.—It appeared that on April 20 Mr. Bennett called at the defendant's shop and asked for $\frac{1}{4}$ lb. of cocoa, with which he was served by Miss Watts, and for which he paid 2d. He divided the packet into three portions, giving Miss Watts part, keeping part himself, and sending the third part to the Birmingham Analyst (Dr. Bostock Hill), whose report showed it to contain 20 per cent. sugar and 15 per cent. starch.—In cross-examination the Inspector admitted that the cocoa supplied was in a packet labelled "Pearl Cocoa." He did not read the labels at the time, but there was one at the bottom which said, "Containing cocoa, combined with other ingredients, the perfect purity and wholesomeness of which are guaranteed in accordance with the Act of Parliament."—For the defence, Mr. Cross said that Messrs. Fry accepted all the responsibility. He submitted that the firm had done everything required by the Legislature since the passing of the Act of 1875, and maintained that on the question of fraud they were protected by their label. The article was sold as a mixture. A similar quantity of pure soluble cocoa would be worth 9d. or 9½d.—Mr. H. Deacon, one of Messrs. Fry's managers, said the article in question had been made by the firm for 40 years. He described the composition of soluble and "pearl" cocoa, the latter consisting of cocoa, sago, and the best white sugar.—The Bench eventually dismissed the case, the Chairman remarking that there had been no direct evidence of fraud, although it might appear sailing pretty close to the wind. They were strongly of opinion that it would be far fairer to make it appear plainly on a label on each packet that "This article is a mixture," and then there would be no cause for complaint.

PAREGORIC.

At the Birmingham Police-court, on the 2nd inst, Messrs. J. H. Blunt and Sons, Limited, druggists, were fined £3 and costs for selling adulterated paregoric at Stratford-road. The Inspector stated that he bought six ounces of paregoric which contained 50 per cent. of added water, and was deficient in opium and oil of aniseed. The Chairman said the case was a serious one, as death might result if chemists were not careful in making up drugs.

PRACTICAL PAPERS FOR GROCERS.—No. 3.

MARGARINE.

SUCCESSFUL ACTION FOR DAMAGES AGAINST THE WHOLESALE DEALER.

At Dublin, before Mr. Justice Gibson and a special jury, the case of Fitzgerald v. Leonard was heard. The plaintiff, Mrs. Mary Fitzgerald, sought damages laid at £300 from the defendant, Mr. John Leonard, of Little-green, butter and egg factor, for having, as she alleged, falsely represented to her that certain margarine was butter, whereby she was induced to purchase it. She subsequently exposed it for sale, and was prosecuted by the Public Health Department, and fined in one of the police offices on the 9th of last March. She alleged that, in consequence of what had resulted from the false representation, she had suffered serious loss and injury in her business. The defence was a denial that any false representation had been made by the defendant, and an allegation that the plaintiff had examined and tested the substance in question, and relied upon her own judgment respecting it before she bought it. There were further pleas that the substance was butter, and that if it were not the defendant was not aware of that fact.

Messrs. Seymour Bushe, Q.C., and Harney (instructed by Mr. Hanmore) were for the plaintiff.

Messrs. O'Shaughnessy, Q.C., and M'Inerney (instructed by Messrs. Casey and Clay) were for the defendant.

The jury found the substance was margarine, that it was sold by the defendant, and assessed the damages at £25 and costs, and certified for the special jury.

Mrs. Fitzgerald deserves the thanks of every retailer in the United Kingdom for her spirited action. When will grocers see that their real interest lies not in fighting appeals for manufacturers, but in prosecuting them where they have been the victims of fraud? We have for months shown that it would pay them to do so.

THE *Real* SIR CHARLES CAMERON AND THE INSOLENT IRISH COUNSEL.

At Dublin, on June 1st, the butter adulteration case recorded in our previous issues, was decided before Mr. Swifte. Peter Murphy, 60, South Great George's-street, was summoned at the instance of James Cook, Food Inspector of the Corporation, for having sold to complainant 1 lb. of butter which was not of the nature, substance, or quality of the article demanded by the complainant.

Mr. O'Shaughnessy said that the certificate from Somerset House was in the same terms as the evidence of Sir Charles Cameron, and simply stated that the adulteration was 20 per cent., or one-fifth of the whole bulk, without giving any particulars of the 20 per cent. of what they said was foreign, but his client bought this butter from a butter factor as butter, and paid 9½d. per lb. for it, and sold it at 10d. per lb., and as far as he was concerned, assuming this analysis to be correct there was neither fraud, dishonesty, nor misconduct. He paid the price that is ordinarily paid for butter, and sold it in the same way. Professor Tichbourne adhered to his opinion that the butter was not adulterated.

Mr. M'Inerney said that he came to the court to hear the judgment, but after what had been said he would point out that this was not a prosecution by Sir Charles Cameron, but by the Corporation of Dublin, and it was brought to protect the public from the sale of adulterated food, and to provide that the public shall be sold pure food, not adulterated. The adulteration in this case was proved by the certificate of the analyst of the City of Dublin. That was questioned, and he was brought to the court for cross-examination, and Mr. O'Shaughnessy said that he would impugn the certificate of the Public Analyst of the City. They then brought in Dr. Lapper, who corroborated the certificate of Sir Charles Cameron. Professor Tichbourne was examined for the defence, and Mr. O'Shaughnessy said that he would produce the man who made the butter to show it was not adulterated.

Mr. O'Shaughnessy—I never said such a thing.

Mr. M'Inerney—You did, and you reiterated it over and over again, and the maker was here. The Act of Parliament gave an appeal from the certificate of the analyst in cases of dispute to Somerset House, and they certify that it was adulterated one-fifth. He now asked to have the full penalty imposed to protect the public, and give costs of the proceedings as well. There were three analysts in Somerset House, and they bore out the certificates that had been produced there in Court. The defendant had been fined before, and the fine appeared to have produced very little effect upon him.

Mr. Swifte said that the authorities in Somerset House were made practically the Court of Appeal in case of dispute as to the analysis, and he thought that the Legislature had shown a great deal of wisdom in so ordering. In this case they had two eminent analysts certifying as to the adulteration of the butter—Sir Chas. Cameron and Dr. Lapper, and on the other hand they had Professor

Tichbourne giving his opinion that the butter was perfectly pure. A sample was then sent to Somerset House, and they remitted a certificate which confirmed the report of Sir Charles Cameron and Dr. Lapper, and it appeared from that statement that if anything Sir Charles Cameron had understated the case, for the certificate from Somerset House stated that the adulteration was not less than 20 per cent.; showing that there was no inclination on Sir Charles's part to overstate the facts. They had the three analysts of Somerset House, who of course were far removed from having any interest in the case, and two other eminent analysts certifying to the adulteration. He should therefore convict the defendant. The case was not in itself of very special importance; but it possessed a special importance for this reason—for there was an important one raised other than the main issue, and that was that Sir Chas. Cameron's competency as Public Analyst had been questioned. That was a matter of great importance to the citizens of Dublin, and he was glad to say that Sir Charles's opinion had been fully confirmed, and his reputation and competency, if they had ever been disputed—which they never had to his knowledge—had been re-affirmed, he would not say re-established, for it had never been disputed. From that point of view the case was one of very great importance, and Sir Charles Cameron was to be personally congratulated on the result, and he thought that the Corporation may be congratulated also on having secured the services of one who had gone through the ordeal and had come out of it unstained, and his reputation enhanced by it. The people of Dublin, too, are to be congratulated on having their interests and the interests of the public health protected so efficiently, and in the interests of commercial morality it is well that these matters should be brought out. The defendant had been convicted before and fined £2. He had been asked in this case to impose the full penalty, which would be £20. He was not disposed to do that. It was quite possible that the defendant might not be morally responsible. He swore that he bought this butter at a fair price from Leonard, who swore that he had got the butter from a farmer in the county Tyrone, but the farmer was not examined, although it was stated that he had been in court. He would impose a fine of £10 and would give £5 costs for the expenses which had to be gone through, owing to way in which the case was conducted. Sir Charles Cameron's competency had been openly assailed.

Mr. O'Shaughnessy said that Sir Charles Cameron was not there on summons, but he was bound to attend in every case, and was paid £1,200 a year for it.

Mr. Swifte—I apprehend that the Corporation had to pay Dr. Lapper for having to attend here. It was a fair case for Mr. M'Inerney to appear in, as there was an array of counsel on the other side. I will give £5 costs in addition to the £10 fine.

Mr. O'Shaughnessy—We have paid already Somerset House.

Mr. Swifte—The £5 is exclusive of the guinea paid to Somerset House.

Sir Charles Cameron said he was not bound to come to court to give evidence, and he was also entitled to 10s. 6d. for each analysis. It was given in every case in England, and though he did not charge it he claimed to have the right to do so. He was entitled to it even on his agreement with the Corporation of Dublin if he chose to enforce it. He never asked for it, but he protested against it being stated that he was not entitled to it.

MEAT PROSECUTIONS.

At Darwen, on June 1st, Thos. Butterfield, butcher, 10, Bridge-street, was summoned for having exposed for sale the carcass of a calf, which was unfit for the food of man. Mr. Bickerstaffe, Dead Meat Inspector, stated that he visited the defendant's shop, on April 15th, and found a calf, which was unfit for food exposed for sale. He conveyed the animal to the slaughter-house, and sent for the Medical Officer and the Sanitary Inspector, both of whom pronounced it to be bad. Subsequently a Magistrate ordered the carcass to be destroyed.—In answer to Mr. Withers, who defended, the witness said the calf was what was generally known as "slink." He admitted that Mr. Holroyd, a veterinary surgeon, of Blackburn, was called in by Butterfield to see the animal, and that the defendant asked him (witness) not to have it destroyed until a second veterinary surgeon and another person had seen it. Witness called in a veterinary surgeon (Mr. Marsland).—For the defence Mr. Withers took a number of legal objections, and also stated that he had a good defence on the merits of the case. The calf was passed by the Sanitary Inspector of Blackburn before it was taken to Darwen. On Bickerstaffe saying that the animal was unfit for the food of man, the defendant called in a veterinary surgeon from Blackburn who would say that it was fit for food. At the conclusion of Mr. Withers' statement Mr. Costeker, who conducted the prosecution, said he did not know before the case commenced that Mr. Marsland had seen the animal. On hearing that that gentleman had been called in he sent for him and Mr. Marsland had told him that it was not a bad case of diseased meat. Under the circumstances he (Mr. Costeker) had suggested to Mr. Withers that the defendant should pay the costs and the case be brought to a close. Mr. Withers thought that the summons ought to be withdrawn, and neither side ask for costs. Mr. Marsland, who was called by the magistrates, said the calf was very emaciated. It was without fat and very flabby. It was free from disease, and if it had been well cooked it might not have done a strong man any harm. The summons was eventually withdrawn on the understanding that the defendant paid £1 towards the costs.

THE MAYOR OF BEDFORD DOGBERRYIZES.

At the last meeting of the Bedford Town Council, the analyst's report was read, and stated that six samples of beer and three of milk had been analyzed, and all found to be genuine.

The Mayor commented strongly on this subject, and said the Adulteration Act was perfectly useless. If 500 samples were sent they would all be returned as good and sound. He thought it was a useless expense to go on trying to give effect to the Act until they got some alteration in the law. As it seemed to him, Analysts performed their work in a perfunctory manner, and as long as they were left alone it did not matter to them whether the samples were such as would meet with the approval of the public.

Mr. Carter did not think that statement was fair to an honourable profession. There were many things connected with the procuring of samples. When the Inspector collected samples he was well known. In the county another method was being adopted, and the Chief Constable could appoint someone who was not known to purchase samples for analysis.

The Mayor said it was a most important matter, and he thought some change was wanted. There would be far less drunkenness in the country if the beer consisted of pure malt and hops (hear, hear).

We would emphasise Mr. Carter's rebuke to this very positive but very ignorant Mayor, who apparently expects an Analyst to condemn all specimens, even genuine ones, as adulterated. If the Mayor of Bedford knew anything about the question, he would have saved himself from a ridiculous exhibition. As long back as September, last year, we made public the reasons why beer has become so abominable, and why English barley growing is being crushed out of existence. An eminent analyst, whose letter we published, said:—

"Owing to the excise authorities, advised as they are by Dr. Bell and his colleagues at Somerset House, the present state of regulations concerning beer is truly deplorable. For fiscal purposes one substance after another has been allowed to be put into beer. There is no need to add malt, nor to use hops; there is no regulation as to the minimum strength; you can add as much salt as you like, and injurious preservatives in any amount, to counteract the effects of bad brewing. In fact, beer at present, thanks to Somerset House, may be any alcoholic decoction which the ingenuity and dishonesty of a brewer may suggest, and if a public analyst takes proceedings against a particularly bad sample, he is met in Court by interested brewers' chemists, who swear that all is as it ought to be, and Somerset House appears with all its official weight and defends anything and everything. As a public Analyst, I frequently am called upon to analyse beer for the authorities under which I act, but I have invariably to report that, according to excise regulations, such samples are genuine. My authorities, who know in many cases that the samples sent me are of vile quality, no doubt think that they have either a fool or an incompetent chemist as public Analyst."

Now, if this peculiar specimen of a Mayor had expended his wrath upon the Government department that has thus debauched beer and injured home industries, we could understand his tirade. As it is, his attack is adding insult to injury. Surely three samples of beer and three of milk collected by officials well known to the vendors and certain to be supplied with genuine articles, cannot be called enforcing the Food and Drugs Acts? The last Local Government Board Report shows no samples of butter, lard, vinegar, coffee, mustard, pepper, spirits, wine or drugs, were taken in Bedford for the whole year. If the samples were properly taken of various substances by persons unknown to the shopkeepers, we venture to say the result would be very different to what it now is.

In our next issue we shall go fully into the character of this Corporation. But pending our exposures, we would ask if this beer was designedly poisoned by the orders of the Corporation, as on a previous occasion?

FULHAM VESTRY PROTECTS THE SLUM PROPERTY OWNER.

The muzzling of the Fulham new Medical Officer has quickly begun. At the last meeting of the Vestry a question arose as to the closing of houses which were in decay. A member opposed any action for the closing of houses simply on the report of the medical officer of health. The question, he maintained, should be first considered by the Sanitary Committee. He wanted to know whether the owners had had the opportunity of placing their property in repair.—Dr. Hill said the medical officer of health was perfectly in order in reporting to the Vestry that the houses were insanitary and unfit for habitation. He moved that the houses be closed.—A proposition that the matter be referred to the Sanitary Committee was carried.—This class of conduct is only what is to be expected so long as ratepayers elect Mr. Slum Owner and Jerry Builder, Esq., on vestries. It is their business to "burke" the Public Health Acts, hamper the Medical Officer and Sanitary Inspectors.

THE *Other* SIR CHARLES CAMERON.

" RHYMES BY BARONETS."

THE Queen's birthday honours form the subject of a drivelling correspondence in verse between Sir Wilfred Lawson, M.P., and Sir Charles (late Dr.) Cameron, M.P., a new baronet. The former writes :—

My dear Sir Charles, you are, I see,
Henceforth a baronet to be.
Long life and happiness I trust
May be for one so good and just.
May in your arms fresh strength be found
To knock State churches to the ground.
And when drink's standard wide is flung,
Charge, Cameron, charge ! charge down the Bung.
I've been a baronet a long time now ;
It's done me no great good, I trow.
A man, you know, of one idea,
Who's steadily opposed to beer,
Is one fit only to despise—
At least, so say the good and wise.
But you've two ideas, I know ;
You'd lay both Church and public low.
Press boldly on, and we shall get
Some good from out a baronet.
Then, when you've carried out your plan,
Come back and be *once more a man*.
With Bung o'erthrown and Churches free,
All will be smooth for you and me.
We'll lay all titles then aside,
And gaze upon our land with pride.
But no ! there's one thing more to do,
A toughish job for me and you.
By Lords we've been too long annoyed.
The House of Lords must be destroyed.
Destruction that way clearly sets
Of Barons by the Baronets.

The italics are our own. We regret to see that Sir Wilfred rather gives his friend away by revealing to the public that Dr. Cameron, M.P., has only "two ideas," but his entreaty to the new baronet to be "*once more a man*" is one we cordially endorse. It is what we have for months been ourselves requesting.

Sir Charles Cameron, M.P., swelling with the divine afflatus, drops, like Silas Wegg, into poetry, with about the same ability.

I haste sincerely to express
In bardo-baronetic dress
My wife's and own deep obligations
For your most kind felicitations.
With hopes of pubs and lords destroying,
My future years may well be buoying.
But now, Sir Wilfred, don't you think
You're just a little hard on drink ?
I own I felt strong inclination
To crown the honour with libation
(Weakness in which you ne'er had part,
You're an hereditary bart.),
Till a good *genius in my noddle*
Said I should take you for my model.
You grant, I think, too short utility
To baronets of our ability ;
For when we've settled Church and Lords,
When Bung and Bishop are mere words,
We two at least shall still have uses
In regulating many more abuses.
In the old way we'll always hammer on.
Yours most sincerely, Charles Cameron.

By way of rejoinder Sir Wilfred Lawson writes :—

If baronets can write like this,
They're worthy of immortal bliss.
No baronet, it seems to me,
But Poet Laureate you should be.

This poor twaddle of "noddle" and "model" was deemed so important by its authors that special copies of it were sent to the press. It furnished the House of Commons' lobby with cause for pity, but did not answer the general query, "For what in heaven's name was Dr. Cameron, M.P., made a baronet ?" Sir Wilfred Lawson's illiterate rhymes by no means explain it, and the question remains unsolved. Not that it is of any importance what he is, any more than was the fly in amber. The bewildering conundrum is the only interesting thing about it. "How did he get there ?" "Labby," in the current issue of *Truth*, suggests a possible reason, cruelly saying, "To my thinking, it is a curious phase of human folly for a man to wish to prefix to his name the word 'Sir' ; but if this pleases him, or if it pleases him to hang round his neck a piece of ribbon, or to wear on his coat a piece of metal, it were as cruel to deny him the gratification as it would be to refuse a carrot to a donkey. James I. always seemed to me a sensible monarch when, being in want of funds, he sold baronetcies for £500. At present, I estimate that £10,000 might be obtained for each of them : indeed, I believe that each party disposes of them, at about this price,

to recruit the party chest." But we cannot accept "Labby's" reasoning as conclusive ; so we have to ask the question Why the baronetcy ? Was he made a baronet for his persistent efforts to pilot through the House of Commons a bill that would plunder the public, kill the English, Irish, and Scotch butter trades, and lay all native agricultural industries at the feet of the Hamburg and like "Free Fraud" gangs ? or was his promotion the reward of the mal-a-propos folly that gave the early days of the session over to a challenged vote of censure as embarrassing to the Government as it was opportune for the Government's enemies. The following verses do not explain it. We would hasten to say that we doubt these verses to be the production of the new candidate for the poet laureateship. They are apparently above the level of what the new Bart. is capable, and we rather incline to the opinion that our tame office boy has been employing his spare moments with a rhyming dictionary and borrowed some House of Commons note paper to aid the deception. The verses are styled.

"THE BARDO BARONETIC DOCTOR TO HIS BEARDED PARD."

"My old pal Wil, I'll take it ill
If you don't vote straight for my 'Warranty' bill ;
It's getting from every quarter shocks,
And the awkwardest of awkward knocks.
Glasgow's Public Health Committee
Spoilt my game, and more's the pity ;
Although I own the 'Daily Mail'
The stalwart patriots will not quail.
St. George's Vestry led the van,
And on my bill they placed their ban ;
Next Dr. Teed with ruthless skill
Tore into shreds my artful bill ;
Then Harris of Islington came to the fore,
And drove in its coffin one nail more.
And the very alert Board of Works at the Strand
Came down on my bill with a pitiless hand ;
St. Olave's and Kensington each had a whack
And between them they've just about broken its back.
So dear pal Wil I'll take it ill
If you don't help me out with my 'warranty' bill.
For although I can now put a baronet's glamour on,
The bill's in 'Queer-street' of your pal, Charles Cameron."

Our doubt that the new Bart. is the author of the foregoing pathetic lines, is increased by the fact, that accompanying them came the following strange query—"Ought not the other Sir Charles Cameron—the *real* one, who is president of the Society of Public Analysts, and Executive Medical Officer of Health for Dublin—apply for an injunction against what must be a very embarrassing duplication of title ?

The fact that the bill is in "Queer-street" seems emphasised by the action of the Chemical Section of the London Chamber of Commerce, which on June 1st, once more expressed its disapproval of Dr. Cameron's bill to "Amend the Food and Drugs Acts."

An Atrabilious correspondent, for whose prescience we have great admiration, has been roused by the birthday honours to send us the following, which bears eloquent testimony to his skill in research and adaptation, "Considering that Dr. Cameron's Bill would squelch not only English and Irish industries, but make the Public Analyst himself as extinct as the dodo, how is it that Dr. Cameron is still an honorary member of the Society of Public Analysts ?" Our correspondent growls at the Public Analysts.

"May they suffer lumbago and pericarditis,
The gout, diabetes, and chronic bronchitis ;
May lupus eternally feast on their noses,
And their bones waste away in the fangs of necrosis.
If they don't forthwith bring a Nasmyth hammer on,
And squash their honorary member Cameron."

MORE CONDEMNATIONS OF SIR CHAS. CAMERON, M.P., AND HIS BILL.

At the last meeting of the Kensington Vestry letters were read from the Lewisham District Board of Works, with reference to the Sale of Food and Drugs Act (1875), &c., Amendment Bill, expressing their concurrence with the opinion that before the Acts are amended the whole question should be fully considered by a Select Committee of the House of Commons ; and from the Limehouse District Board of Works, with reference to the Sale of Food and Drugs Act (1875), &c., Amendment Bill, stating that the Board have had under consideration the Vestry's circular letter of the 22nd March last, and that they approve the opinions expressed in the copy of resolution forwarded therewith.—

The St. Olave's District Board of Works forwarded the following resolution passed by them :—"That the Board disapprove of the Sale of Food and Drugs Act (1875), &c., Amendment Bill, as tending to hinder rather than to help the prosecution of offenders under the Sale of Food and Drugs Acts."

SANITARY INSPECTORS' REPORTS.

THE BANFF COUNTY COUNCIL.

In his annual report, Mr. Mackintosh says:—

The Banff district includes fully two-thirds of the landward population, which fact necessitates greater vigilance in the Banff district on the part of the sanitary authorities of the county. In general, the water was naturally wholesome, but not always protected from local conditions of contamination. The Dairies, Cowsheds, and Milkshops Order of 1885, and relative orders and regulations had not hitherto been carefully, if at all, enforced in either the Banff or the Keith districts. In this connection, the following faults were found with dairies—(1) in some cases an inadequate supply of wholesome water; (2) in most cases the milkhouse connected with the dwelling-house, or as in some villages, and at some of the crofts, where a certain profit was made from the sale of milk, milk kept inside sleeping apartments, or in kitchen presses—a serious consideration in the event of infectious disease occurring in the dwelling-house; (3) accumulations of offensive matter near milk-houses or dwellings in which milk is kept; (4) dung heaps so situated as to ventilate into byres; (5) drains with untrapped openings inside the byres; (6) byres in many instances too small for the number of animals; (7) and byres in the majority of cases ill paved and ill ventilated. In order to have the sources of milk supplies, and the supplies as well, properly attended to, it was recommended that inspectors of dairies should be appointed, and regulations made under Article 13 of the Order of 1885.

Mr. Mackintosh is evidently an earnest worker, for he recommends that an *Analyst* should be appointed in terms of Section 10 of the *Sale of Food and Drugs Act*, 1875.

Respecting the condition of the drainage of the county, the report says that, with reference to farm steadings (some of which are excellent), crofts and cottar dwellings (especially of the older class), the drainage arrangements, where they exist at all, or exist merely in the form of natural surface channels, are, in a large proportion of the places examined, in a defective condition—i.e., the drains are either stone built, or formed of agricultural faucetless pipes, and generally without traps of any kind. The report emphasized the importance of all drains from dwelling houses and farm steadings being constructed of fireclay spigot and faucet pipes, joined with good cement, and properly trapped and ventilated. The nuisances dealt with during the year included those arising from shallow or dipping wells, or steading pumps in an unprotected state; damp houses or unhealthy sleeping places; defective drains or traps; want of drains or traps; foul ditches or channels; dirty houses or premises, including pigsties; overcrowding—especially in the villages; foul middens or privies, or want of proper ashpits or privies; defects in buildings under section 30 of the Public Health Act; and structural defects, &c., at dairy premises. The report concluded with saying that the adoption by the County Council of by-laws made under section 57 of the Local Government (Scotland) Act, 1889, similar to those submitted by Dr. Cameron and Mr. Mackintosh to the County Council in 1891, would be of incalculable service in the abatement, but chiefly in the prevention, of the nuisances enumerated above.

The Convener remarked that Mr. Mackintosh's report gave evidence of an enormous amount of care and attention.

We hope to see Mr. Mackintosh's recommendations carried into effect. If English, Scotch, Irish and Welsh County Councils would only reflect on the enormous damage done to our agricultural industries by fraud in food stuffs, we feel sure they would at once see the need for the appointment of analysts and inspectors, and for an adequate number of samples being taken. We are glad to see that the allowance for travelling expenses of the medical officer has been increased from £50 to £100 per annum.

THE BRITISH MEDICAL JOURNAL AND THE HARNESS ELECTROPATHIC BELT.

Straight from the shoulder the *British Medical Journal*, of June 3rd, says:—

"Our readers may remember that in the issue of the *British Medical Journal*, of November 12th last, the following paragraph appeared:—

"We have good grounds for stating that the *Times* has recently refused a four-column advertisement from the Harness Electropathic Belt Establishment, of the value of £80, a course worthy of the high and honourable traditions of that journal."

"The object and intention of the paragraph was, we now unreservedly state (as Mr. Harness himself has put it in the action he brought against the Journal), that the Medical Battery Company (that is Mr. Harness) 'carried on so dishonest and disreputable a trade and business, and were so notorious and of such ill repute as a trading company, that it was discreditable and unworthy on the part of a newspaper proprietor of high position and standing to transact with the plaintiff company the ordinary business of newspaper proprietors with traders in accepting and inserting at all, or even upon more favourable terms, the plaintiffs' trade advertisements.'"

"The paragraph was, in fact, inserted in the Journal with the sole object of raising boldly between ourselves and Mr. Harness the question whether the business carried on by him was a legitimate and honest one, or the very reverse; and we were prepared, at any cost and trouble, to have this question fully and fairly tried by a jury, and to abide by their decision on the issue presented to them. Accordingly, on the action, being commenced, we admitted that we had published the paragraph complained of, and justified what we had written.

"Our readers will perhaps not be altogether surprised to learn that Mr. [Harness, after we put in our defence to his action, took no further steps in the matter. Determined to bring him to book, after waiting a reasonable time, we applied for an Order that Mr. Harness should be compelled either to go on or to discontinue this action, and an Order was accordingly made that unless he proceeded to give notice of trial and to enter his action for trial within twenty-one days, it should be dismissed with costs. After what we have already stated, our readers will doubtless anticipate the sequel. The twenty-one days elapsed. Mr. Harness abandoned his action, and the same was dismissed with costs, since paid by him. These costs, being what are termed party and party costs, necessarily do not represent the expenses which the Association has been put to in preparing to meet and justify the paragraph which Mr. Harness has allowed to go against him unrefuted. That, however, is a very small matter. The result of this abortive action is a convincing proof that Mr. Harness was not prepared to meet the charges brought against him by the Journal in open court, and is conclusive that all we have said on the subject of Mr. Harness and his so-called electric belts has been fully justified."

But the advertisements of this imposture adorn the pages of the bulk of the daily papers, in not one of which have we seen any reference to the incident.

ANALYSTS' REPORTS.

KENT COUNTY COUNCIL.

The quarterly report of Dr. M. A. Adams, public analyst for the county of Kent, was presented to the Council on the 17th. Mr. Adams' report says:—

"Re 'Food and Drugs Act, 1875.'"

"Herewith I have the honour of reporting upon 178 samples of food received under the provisions of this Act during the past quarter. 20=11.23% were adulterated; included among these were the following: 4 milks, 2 cocoas, 2 mustards, 5 gins, 3 whiskeys, and 2 each of brandy and rum. In 4 of the spirits the degree of adulteration was insignificant, amounting to less than 2 degrees of proof spirit in either case. The most serious offence was in the case of a milk from Malling, which contained at least 27 per cent. of added water, the calculation being based upon the composition of a milk at a very low standard. This, of course, is a barefaced instance of adulteration on a wholesale scale.

"Two other samples of milk, from the Dartford Metropolitan district, afford examples of adulteration of an opposite kind, one of these was watered to the extent of 6 per cent., on my advice a second sample was procured from the same dealer, which proved to contain 8 per cent. of added water. To my mind this habitual sneaking kind of adulteration is just as much or even more deserving of official punishment as the grosser sort of adulteration. For the latter must in the long run make itself felt by loss of custom, even without official recognition, whilst the former, so far as the unassisted public is concerned, is more likely to pass undetected.

"By the way, it appears to me that in some districts, Dartford and thereabouts being one, a pernicious custom prevails of what I should call scientific adulteration of milk.

"It seems to be a practice to reduce good milk by one means or another to the very verge of what is passable; and I think I am justified in believing that this is done in more ways than one. Of course the simple plan of adding water straightaway to the milk is the common one, but the practice is fostered and obscured by the far cleverer way of actually making the cow *participis criminis* in the fraud, for I take it, it is no less morally wrong to water milk by the help of the cow than without her help. With the unlimited range provided by nature for mankind to pick and choose from, it appears there is a certain breed of cows that gives an enormous yield of a marvellously poor secretion, such as no tradesman who values his business reputation would dare to offer his customers as milk; indeed, I quite believe the commercial knowledge of this curious race of cows, so far as milk producing is concerned, is the indirect result of the working of the Food and Drugs Act, and never would have been thought of as milk yielding animals except for the convenience of designing traders who have seized upon the abnormal habit of these creatures, for the purpose of bringing down the standard that shall be taken to indicate natural milk to a point that will cover the fraudulent dilution of ordinary milk by the addition of water, and so paralyse the protection to be looked for from the Food and Drugs Act.

"For this reason alone, it appears to me desirable and, indeed, practically essential, that a minimum standard for milk should be fixed by law.

"I have the honour to be,

"My Lords and Gentlemen,

"Your obedient Servant,

"MATTHEW A. ADAMS."

POPLAR.

In his quarterly report to the Poplar District Board of Works, Mr. W. C. Young, the public analyst, says that during the quarter ended March last the sanitary inspectors had submitted to him for analysis 36 milks, 7 butters, 5 breads, 6 flours, 6 vinegars, 8 lime waters, and 4 tincture of quinine, a total of 72 samples. Of the milks, 28 were genuine, 7 adulterated with water, and 1 deficient in cream to the extent of 52 per cent. Of the butters, 4 were genuine, and 2 adulterated with foreign fat to the extent of 50 and 57 per cent. respectively. The breads, flours, and vinegars were all genuine. Of the lime waters, 6 were of proper strength and 2 deficient in lime. Three of the samples of quinine were genuine.

THE HOUSE OF LORDS COMMITTEE AND FOREIGN PRODUCE.

A Select Committee of the House of Lords sat on the 2nd inst. to take evidence on the question "Whether legislation for the purpose of requiring the foreign or colonial origin of imported agricultural and horticultural produce—and especially meat, cheese, and fruit—to be marked thereon, or otherwise indicated, is necessary, expedient and feasible; and, if so, what are the provisions which such legislation should comprise." The Earl of Onslow presided. Professor Long, of the Agricultural College, Cirencester, who was the first witness, said it was very difficult for any one, not an expert, to tell the difference between imported foreign beef and home-grown beef, but in the case of mutton, although it was difficult to distinguish the two by their appearance, it was, after a little experience, easy to do so by the taste. He suggested that all home-grown meat should be marked, and that no butcher should be allowed to sell any imported meat without having a signboard outside his shop bearing the words "Foreign meat sold here." He did not suggest that marking should be made compulsory, but that it should rest with each butcher to decide whether or not his meat should be marked, and if he sold foreign meat without having a proper signboard outside his premises the responsibility would rest with him. He thought that all imported butter ought to be brought over in boxes of a particular shape. Roll butter, which came in boxes from Normandy not stamped was made in a very crude and dirty manner. Some of this butter was blended by a kneading machine with margarine, and a very large quantity of it went to the best hotels and restaurants in London. There was a large amount of so-called "Cheddar" cheese imported into this country which was sold as English cheese, and to stop this practice he advocated the adoption of the plan in force in America, where there was a law under which the makers of cheese had the opportunity of getting their cheeses branded, and if they came up to a certain quality the makers were able to obtain the highest price of the day. Mr. James Kay, Chairman of the Blackburn and District Farmers' Association and President of the Lancashire Federation of Farmers, dissented from the view expressed by the last witness as to the marking of home grown meat. He contended that the foreign meat should be branded, and that that should be done at the cost of the exporter; otherwise the home trade would be handicapped. The Committee adjourned.

We thought Food and Drugs Inspectors and Public Analysts knew something of this question, but have not heard that the Committee has asked them for any information, which surely seems a one-eyed way for a Committee to get about its work.

ISSUING A FALSE CERTIFICATE OF DEATH.

At the County Police Court, Wolverhampton, on the 29th ult., Joseph Humphrey Jones, stated to be a medical assistant, of Bushbury-lane, was summoned for issuing a false certificate of death. Mr. George William Roach, superintendent registrar for the Cannock district, appeared to prosecute (instructed by the Registrar-General), and Mr. Plumtre (instructed by Mr. T. Gatis) defended. A plea of guilty was put in on behalf of the defendant, and Mr. Plumtre stated that the defendant was not a qualified man, but he had been studying medicine for some years at the Edinburgh University, and had passed all his examinations except the final. He had been an assistant to Dr. Keough, of Wolverhampton, and in January last was called to see a child of Mr. Ibbs, which was suffering from bronchitis. It had been intended to call in Dr. Keough, but as the child died the defendant gave a certificate, which was perfectly accurate, but he signed it as if it came from Dr. Keough. He told Dr. Keough what he had done, and was not aware that he had made himself liable to a penalty. Dr. Keough here said that he had not seen the defendant for three years, and knew nothing of the certificate until after the defendant had seen Mr. Jackson. Dr. Keough was sworn, and stated that the defendant was a pupil at the Wolverhampton General Hospital for some years as a dispenser, and afterwards he assisted witness until about four years ago. He (witness) did not attend Ibbs's child, and the certificate was not in his handwriting. It was, however, like his, and there appeared to have been an attempt to conceal the identity. In reply to Mr. Plumtre, witness said he had allowed the defendant to take charge of patients, as he understood the defendant was a fully qualified man. He was not justified in signing witness's name. The Bench regarded the case as a very serious one, and imposed the full penalty of £10, and the costs, or a month's imprisonment in default.

THE MAIDSTONE MEDICAL OFFICER'S SALARY.—We understand that the Maidstone Town Council have increased the salary of their Medical Officer of Health by some £60 per annum.

CORRESPONDENCE.

To the EDITORS of FOOD AND SANITATION.

GENTLEMEN,—Will you kindly give me your opinion as to the qualities of sulphate of iron. I have always understood there was 3 qualities. No. 1, the *dross*; No. 2, *commercial*, and No. 3, *pure*, for medicinal purposes. I purchased 2 samples, one was called *dross*, the other *commercial*, the difference in price was just double. Your Analyst pronounced them of equal value as disinfectants and antiseptics for sewage purposes. As these were purchased by me from two respectable firms, I cannot understand it. I may add I was told the higher priced article was the better product.—I am, &c.,

PERPLEXED.

[For pharmaceutical purposes the one is very inferior, but as a sewage precipitant ferric salts are quite as effective as ferrous salts, and taking the price into consideration, the cheaper sample is to be preferred to the other.—EDITOR.]

THE VINEGAR IMPOSTURES.

To the EDITORS of FOOD AND SANITATION.

SIRS,—You do the public true and laudable service in your valuable article of 27th ult. upon spurious vinegar.

It is positively astounding that so much ignorance exists upon an article that enters so largely into use of every household both rich and poor.

You show very clearly how the grocers are blind to their own interests. We crave a little of your valuable space to show also how the public are prevented by even some of our large food distributors from obtaining pure articles.

Some months since we introduced a guaranteed pure wine vinegar, the analysis of which, from three independent sources, proved it to be exceptionally fine.

Several samples professing to be of a similar kind were purchased, at prices, retail, ranging from 8d. to 9½d. per bottle, for comparison, these were analysed and found to be simply a decoction of acetic acid; to use the Analyst's words, all of them were more or less aqueous acetic compounds, without the slightest trace or affinity to wine or fruit. Our progress in introducing the pure article was very slow until recently, now scarcely a day passes without enquiries for it, which we attribute mainly to the exposures you have ventilated in your excellent paper.

One very large West-end Association refused to entertain samples of the pure article, on the ground that they had quite as good of So-and-So's make, and this So-and-So's was one among those our Analyst styled as above-mentioned. One of the Birmingham experts showed, by his reservation, that he knew how to take care of his own skin. It is a pity evidence was not brought forward to show that pyro-ligneous acetic acid in any form is a powerful astringent, and therefore, instead of aiding digestion, would simply have the contrary effect. Possibly the public will learn in time that the price they pay for dyspepsia is much too high.—Yours truly,

MARK LANE.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended June 8rd, 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities.	
	1892.	1893.
Animals living:		
Oxen, bulls, cows, and calves	12,974	9,122
Sheep and lambs	1,363	856
Swine	—	—
Fresh meat:—		
Beef	42,756	22,076
Mutton	66,552	46,028
Pork	584	766
Salted or preserved meat:—		
Bacon	79,793	45,973
Beef	8,510	4,493
Hams	28,050	20,981
Pork	4,126	2,199
Meat unenumerated, salted and fresh	2,192	3,166
Meat preserved, otherwise than by salting	17,491	8,744
Dairy produce and substitutes:—		
Butter	42,444	42,098
Margarine	24,020	18,986
Cheese	26,191	18,854
Condensed milk	8,823	11,812
Eggs	Gt. Hndr. 339,379	336,484
Poultry and Game	Value £ 4,133	3,285
Rabbits, dead (not tinned)	Cwts. 202	298
Lard	27,713	19,247
Corn, Grain, Meal and Flour:—		
Wheat	1,554,618	1,374,560
Wheat Meal and Flour	278,507	333,798
Barley	150,262	189,652
Oats	505,286	380,706
Pease	26,536	69,108
Beans	174,969	69,945
Maize or Indian Corn	578,780	1,119,864
Fruit, Raw:—		
Apples	23,791	10,935
Oranges	109,460	47,767
Lemons	8,332	54,183
Cherries	155	61,728
Plums	10	830
Pears	519	9
Grapes	16,969	982
Unenumerated	1,043	41,845
Hops	Cwts. 1,043	1,673
Vegetables, raw—		
Onions, raw	Bush. 24,142	46,324
Potatoes	Cwts. 66,540	249,100
Unenumerated	Value £ 19,790	35,015

* Not separated in 1892

Statistical Office, Custom House, } T. J. PITTAR.
London, June 5th, 1893.

DR. NANSEN HAS ORDERED "FRAME FOOD" JELLY, ETC., FOR HIS NORTH POLE EXPEDITION!

Dr. NANSEN writes—(February 11th, 1893)—"I have now carefully examined the 'Frame Food' Jelly and Stamina Tablets, and think they are very good. We shall, of course, use a great deal of the Jelly. I would give the men as much as 20 grammes each man each day. This makes a great quantity for 12 men in 2,000 days. Please send 1,200 lbs. Jelly, 200 lbs. Extract, and 300 lbs. Stamina Tablets."

WHEAT PHOSPHATES NOURISH BRAIN and FRAME, FORM BONE, TEETH and MUSCLE, and ENRICH the BLOOD



Is a Cooked Food strengthened with the

"FRAME FOOD" EXTRACT of WHEAT PHOSPHATES, and therefore the MOST NUTRITIOUS FOOD in the WORLD.

For INFANTS ; Developing Bones, Muscles, Teeth, Brain.
For INVALIDS ; Restorative and Invigorating.
For ADULTS ; A Delicious Breakfast and Supper Dish ;
Increases Vigour, Restores Strength.

½-lb. Sample in handsome enamelled Tin sent free on receipt of 3d. to cover postage.

Sold by Grocers, Chemists, &c., in Tins, 1 lb. at 1s., 4 lbs. at 3s. 9d., or sent carriage paid by F. F. Co.

"FRAME FOOD" STAMINA TABLETS

{ INVALUABLE FOR TRAVELLERS, CYCLISTS, ATHLETES, and for all who require a temporary substitute for a regular meal. Sold by Chemists, Grocers, &c., in 6d. and 1s. Boxes, or sent carriage paid by

FRAME FOOD CO., LD., Lombard Road, BATTERSEA, LONDON, S.W.



Is made of the

"FRAME FOOD" EXTRACT of WHEAT PHOSPHATES and PURE CANE SUGAR, and is therefore MOST NOURISHING ; it is DELICIOUS eaten as jam on bread and butter, an excellent substitute for MALT EXTRACT, being CHEAPER, NICER, and more NOURISHING.

"Frame Food" Jelly costs 7d. per lb., Malt Extract costs 3s.

Sold by Chemists, Grocers, &c., in jars about 1½ lbs., at 1s.

Sample 1 lb. jar sent post free for 10d. by F. F. Co.

EDWARDS' DESICCATED SOUP.

IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BORWICKS

BORWICK'S

WHICH IS FREE FROM ALUM.

IT IS THE
BEST THAT MONEY
CAN BUY.

BAKING

600,000 PACKAGES
SOLD WEEKLY.

Perfectly Pure and Wholesome.

POWDER.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make ONE quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT-COFFEE COMPANY.

(Proprietors, KRIKORIAN BROS.)

MONUMENT BUILDINGS, LONDON, E.C.

SMOKERS SHOULD USE CALVERT'S DENTO-PHENOLENE.

1s. 6d., 2s. 6d., and 1lb. 7s. 6d. Bottles.

A Fragrant LIQUID Dentifrice.

A DELICIOUS MOUTH WASH.

Editor of *Health* says:—"An elegant and agreeable Toothwash, most effectual for strengthening the gums in case of tenderness, and ridding the mouth of the aroma of tobacco."

Can be obtained at Chemists, or will be sent post free for value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

"SANITAS" DISINFECTANTS

Unlike most disinfectants—such as the Coal Tar products—do not rob the air of its vital Oxygen (so essential to animal life), nor merely hide the foul smells of decomposition by their own odour; they actually generate Oxygen in an active form, and destroy offensive matters and disease germs. Moreover, the "SANITAS" Disinfectants are non-poisonous, do not stain, are pleasant in use, and natural in character.

Apart from the important consideration that the "SANITAS" Disinfectants have emanated from a well-known chemist (Mr. C. T. KINGZETT, F.I.C., F.C.S.), they have received testimony from Sir HENRY ROSCOE, M.P., F.R.S.; Sir CHARLES CAMERON, M.D., F.R.C.S.I., F.I.C., &c.; Professor T. E. Thorpe, F.R.S., F.I.C., F.C.S.; B. W. RICHARDSON, M.D., F.R.S.; A. B. GRIFFITHS, Ph.D., F.R.S.E., F.C.S.; R. H. HARLAND, F.I.C., F.O.S.; J. BAYNES, F.I.C., F.C.S.; T. PALMER, B.Sc., F.C.S.; and innumerable other Chemical and Medical Authorities; and have received the approval in use of most of the Medical Officers of Health in the United Kingdom.

Pamphlets, fully descriptive of all these manufactures, may be obtained free on application to

The "SANITAS" Company, Lim., Bethnal Green,
LONDON, E.

C. T. KINGZETT, F.I.C., F.C.S.

Author of "Animal Chemistry" (Longmans and Co.); "The Alkali Trade" (Longmans and Co.); and "Natures Hygiene" (Balliere and Co.); &c.
Managing Director and Chemist.

Food and Sanitation.

SATURDAY, JUNE 17, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

MORE SOMERSET HOUSE BLUNDERING.

THERE appears to be no limit to the mistakes of which the Somerset House Analytical Department is capable. We have shown that they cannot analyse foods, but we never suspected them of an inability to detect a bull from a haystack. Had we ventured to assert such a thing we would have been flatly contradicted; and yet their incapacity is even greater than that, for they now present to us the scarcely credible sight of gin-and-beer-testing chemists, who are paid to know what stills are, and who are supposed to be authorities on stills, not even

knowing what a still is. The poor bourgeois gentilhomme who had been talking prose all his life without knowing it, counts as nobody in comparison with the wonderful scientists who have moved amongst stills all their lives, and yet do not know what a still is. We have so often had to expose the scientifically decrepit department that we may be supposed to be biased upon the matter. We hasten, therefore, to acknowledge our indebtedness unto the *Chemical Trade Journal*, of June 10th, for this last crowning proof of Somerset House chemical incapacity. Says the *Chemical Trade Journal* :—

"On Monday last, in the High Court of Justice, the appeal from the decision of the Sunderland magistrates, by the Inland Revenue authorities, appellants, suing for a penalty of £50 from the Sunderland Gas Company, respondents, for using an ammonia still without having previously taken out a licence, was dismissed, with costs against the Crown.

"The history of this case is an interesting one, and is as follows :—The Association of Sulphate of Ammonia Manufacturers has for the past few years had many discussions upon the legality, or otherwise, of the tax demanded upon ammonia stills by the Excise authorities; and the Council, believing the impost illegal, advised its members to refuse payment. The Excise authorities thereupon sued the late Mr. Thos. Illingworth, at the Halifax Police-court; but the magistrates dismissed the information, on the ground that an ammonia still was not a still within the meaning of the Act. The Excise authorities appealed against this decision, and the case was set down for hearing at the Royal Courts of Justice in due course. A few days before the hearing Mr. Illingworth died, and the judges decided that, as the case was personal to Mr. Illingworth, there was an end of the matter, so far as he was concerned.

"Some time afterwards the tax was demanded from the Sunderland Gas Co., who refused to pay, on the ground that the still was not a still within the meaning of the Act. The Excise again prosecuted, and again the magistrates dismissed the information. The Excise thereupon appealed against the decision, the magistrates having stated the case for the superior court in a very clear manner.

"When the appeal came on at the Royal Courts of Justice, several objections were taken by the appellants, to the manner in which the case was stated; and, after a few hours of legal disputing, the 'case' was remitted to the justices for re-statement, and the hearing of further evidence if necessary. A second hearing took place before the justices at Sunderland, the Excise sending down counsel in Mr. Alpe, and, as expert witnesses, Mr. Bannister and Mr. Lewin, of Somerset House Laboratory; the defendant Company being represented by Mr. Evans, of Messrs. Godfrey Rhodes and Evans, of Halifax, who had so carefully mastered the details of the case in the first appeal. Mr. George E. Davis, the patentee of the still or apparatus used by the Sunderland Gas Company, was called for the defence, and Mr. Ackroyd, the Public Analyst for Halifax. In the end the case was re-stated for the superior Court, and the appeal from the justices' decision was heard on Monday last, with the result already noted in our introductory remarks.

"The question now crops up—Will the Inland Revenue authorities refund the taxes they have hitherto demanded under threats of prosecution, and which have hitherto been paid with demur and under protest? It will be argued on their side, perhaps, that the payers should have refused to pay, and so have brought the matter to a practical issue before. But, when the expenses of a lawsuit such as this are borne in mind, it is not in the least surprising that a manufacturer should prefer to pay even what he considers an unjust and illegal impost to the expenses of a suit which, if not carefully and delicately engineered, would be almost sure to fall under the science and practice of a Crown counsel. It would have paid any single manufacturer to have gone on paying the tax to his life's end—aye, and his sons after him—rather than to have borne the cost of an appeal to the High Court, even had he been successful. The attitude taken by the Sunderland Gas Company is much to be commended, and the makers of sulphate all over the Kingdom are much indebted to the Association for having aided in the settlement of a trade grievance, which was a sore point to many, and which probably would not have been thus focussed without its aid."

We have been astounded that the Chancellor of the Exchequer should apparently be satisfied to allow the snuff frauds of thousands of pounds upon the customs, caused by Somerset House chemists' ignorance to be hushed up; that the Inland Revenue Board permits a referee under the Sale of Food and Drugs Acts, who by the Acts is debarred from being engaged in the sale of food or drugs to be chairman of the Civil Service Stores; that Government paid time and Government utensils should be used by Somerset House chemists for private work, in competition with private chemists, but with this exhibition of the Chemical Departments' knowledge before us we shall be curious to see what the Board of Inland Revenue will do. For our part we sincerely hope the Sulphate of Ammonia Manufacturers, who have paid the taxes will sue for their recovery. It may awaken our Government to the desirability of having a capable scientific body to govern the department, which as far as the Food and Drugs Acts go, we stand lamentably in need of. Meanwhile it will interest our American readers to learn that Mr. Bannister, —one of these witnesses, who did not even know what a still is —has, it is stated been selected to act as an expert on the foods exhibited at the Chicago World's Fair. We sympathise deeply with the unfortunate exhibitors.

DISEASE AND DISINFECTANTS.—IV.

In our last article of this series we commented on the careless use of disinfectants by local authorities, without analysis or accurate knowledge of their character. The following case shows the danger attending the use of disinfectants of which the properties and constituents are taken on trust.

ALLEGED POISONING BY THE "THORNLIFFE" DISINFECTANT.

On May 22nd, at the Lancaster Town Hall, Mr. L. Holden, the Coroner, held an inquest on the body of Mr. Charles Wright, a member of the firm of Messrs. Wright and Sons, joiners and builders, Queen-square, Lancaster.—The Coroner told the jury he was sorry they had had to be summoned to enquire into the death of a member of a family well-known in Lancaster, and held in great esteem as tradesmen of the Borough. Priscilla Hodgson was the first witness. She said that she was a domestic servant in the employ of the deceased. Her late master began to be ill about three weeks ago, and her mistress and herself had been in constant attendance upon him ever since. Dr. Hamilton was the medical man attending him. There was a bottle in the room like the one produced (labelled "Thorncliffe disinfectant"), but she never saw her master use it. George Wright, brother of the deceased, said his brother was a partner in the firm, and was 34 years of age. He had seen his brother almost daily since his illness commenced. He was suffering from typhoid fever. He produced a bottle of the "Thorncliffe disinfectant" which he saw in deceased's room. On Friday, the day before he died, he learnt that his brother had drank some of that mixture, but he did not know how much. He was present when his brother died on Saturday night at about eleven o'clock. Isaac Smith, sanitary inspector of the borough, said he knew deceased intimately, and on hearing that he was ill called at the house to enquire after him. He was told that the deceased was "nicely." He recognised the bottle produced. It was one of some they had in the office which were sent out officially as disinfectants. It was got from the manufacturers, Messrs. Newton, Chambers, and Co., of Thorncliffe, near Sheffield. Only one bottle was sent to Mr. Wright's, and it was sent along with a packet of powder on the Saturday previous. When their traveller was in his (Mr. Smith's) office, he distinctly represented that the disinfectant was non-poisonous. Dr. Hamilton, of Dalton-square, Lancaster, said he was called to attend the deceased in his last illness. He was suffering from typhoid fever and was delirious for a week. About one o'clock on Friday he received an urgent message to go and see the deceased, and he went immediately. He then found that the deceased had made an attempt to cut his throat. There was some slight abrasions and only one wound from which blood was flowing. It was not very deep, and was not at all dangerous. Practically, neither the wound nor the abrasions caused or accelerated death. The wound caused a certain loss of blood which, with the antecedent weakness, would no doubt contribute to a certain extent to a fatal issue. He saw a bottle in the room similar to the one produced. While he was attending to the wound the deceased vomited considerably, and the vomit had an odour of the contents of the bottle produced. It seemed to him to have been carbolic acid from the odour. He did not know precisely how the mixture produced was compounded or what its ingredients were. Carbolic acid was a poison, so was naphtha, and assuming that the compound contained either, it contained poison. There was no mistaking the odour of either. He sent for further assistance, and Dr. Parker came, and he was followed by Dr. Metcalfe Johnson. They considered the advisability of using the stomach pump, but the patient showed signs of recovery and they then considered that it would be injudicious to use the stomach pump. The direct cause of death was an overdose of fluid used as a disinfectant, and the only one in the room was contained in the bottle produced. Its action upon the digestive track would be highly corrosive, and it would produce such an amount of irritation as in the end would cause death. Dr. Parker said he was medical officer of health for the borough, and first saw the deceased on Friday last about four o'clock in the afternoon. When he was sent for he went immediately, and found him in bed in an unconscious state. His skin was cold and clammy, and his pupils were contracted. Those symptoms had been caused by the patient having taken some irritant poison. He saw the bottle produced on the dressing table. He smelt deceased breath and found an odour of a disinfectant in it. He put some of the disinfectant on his own tongue. The effect of it was that it burnt his own tongue for about twenty minutes, and so tainted his own breath as to be detected a quarter of an hour afterwards by Dr. Dean without his having been told what had produced it. Mr. Wright became conscious while witness was with him. He asked Mr. Wright if he had taken some of the disinfectant, and deceased replied "Yes, twice." From enquiries which he made in the room, and judging by the quantity taken from the bottle, he ascertained that the deceased must have taken about five ounces of the disinfectant. Witness sent to his surgery for the stomach pump and then left the patient in the care of Dr. Hamilton. He considered that death was the effect of drinking the disinfectant. Upon the conclusion of this evidence the Coroner told the jury that he would adjourn the inquest in order to enable the manufacturers of the disinfectant to attend in their own defence. The bottle was distinctly labelled "non-poisonous," and in a note it was said that it could be taken internally without any danger whatever. The inquest was then adjourned until the following Monday at six o'clock in the evening, when Messrs. Newton, Chamber and Co., the manufacturers of the disinfectant, were represented.

On the resumption of the inquest, Mr. Arthur Marshall Chambers represented the firm, and was officially supported by Mr. Clegg, Mr.

Jason Hall Worrall, chemist to the company, was also present.—Dr. Hamilton was examined by Mr. Clegg respecting his previous evidence, and said that the odour of the deceased's breath was of the same nature as that of the bottle of fluid. He did not think that the wounds on the throat hastened the patient's death, except through slight loss of blood. The symptoms were not all similar to death by carbolic poisoning, but some of them were.—Dr. Parker gave similar evidence.—Mr. Clegg, on behalf of the company, expressed satisfaction at the fair treatment they had received from the Coroner, and said he would call evidence to show that there was no carbolic in the compound, and it was absolutely non-poisonous. Some witnesses had taken it beneficially. Evidence was then given on behalf of the Thorncliffe Company by Mr. Worrall to the effect that the fluid was non-poisonous, and had been taken in quantities equal to 10 drops.—Mr. Carter Bell, Salford and Cheshire county analyst, agreed that it was a non-poisonous compound.—In reply to the Coroner, both witnesses said they would not care to take 4 oz., the quantity supposed to be taken by the deceased.—Mr. Clegg then called Mr. Chambers, who produced the report of Dr. Klein, M.D., F.R.S., who had analysed the compound as follows:—"In this last series of experiments, it was attempted to ascertain whether disinfectant inoculated sub-cutaneously into the tissues, or introduced into the stomach of rabbits, produced any bad results. For this purpose four rabbits were experimented with. Two rabbits each received into subcutaneous tissue of groin 0.25 cc. of disinfecting mixture of the strength of 1 in 100. The animals remained perfectly well. No tumour appeared at the seat of inoculation. The animals remained lively and fed well. Two rabbits received through the mouth 0.25 cc. of same mixture with similar result. From these experiments it appears that the disinfectant has no detrimental effect on any kind of animals, either when introduced by injection directly into tissue, or when administered by the stomach.—Dr. Campbell Brown, County Analyst, reported that the compound contained 9 per cent. of phenol. The inquest was ultimately adjourned on account of the difference between the analysts as to the nature of the compound.

On the resumption of the inquest, additional evidence was called by Mr. Clegg, solicitor, Sheffield, who appeared on behalf of the Company.—Dr. Stewart Pennington Hallows, Whetston, London, said he knew the Thorncliffe Disinfectant Fluid very well indeed. He had prescribed it pretty extensively during the last four months both in England and Scotland. In his opinion it was decidedly non-poisonous. He had come to that conclusion after a long series of trials both internally and externally. He had taken as far as 40 drops of the pure oil and three fluid ounces of the compound within 24 hours with beneficial effects, for the purpose of showing scientific men that it was non-poisonous. He had felt a slight burning sensation on the tongue for about 20 minutes, and longer if he had been smoking previously. He had also prescribed it to young children between three and four months old. If he had taken the same quantity of carbolic acid or its derivatives he would have been killed within a few minutes. In reply to the Coroner, he said that if occasion required he would take four ounces of the fluid without hesitation. He prescribed it as a non-poisonous antiseptic. He had had considerable experience in typhoid cases, and had prescribed it for typhoid and whooping cough. Mr. Clegg submitted, in reply to the Coroner, that death did not arise from poisoning, but from rupture of the bowels, caused by the exertion of getting out of bed while suffering from typhoid. He regretted that a post mortem examination was not held, because the result would then have been beyond all doubt. It would also have been very much more satisfactory if the bottle of fluid in question had been kept. The Coroner said there was sufficient kept for Dr. Campbell Brown to form his conclusions upon the fluid. Mr. Clegg said they were at variance with Dr. Campbell Brown, and he thought that he would have been delighted to cross-examine him. The Coroner: You shall have an opportunity. Mr. W. Allott, Chapelton, near Sheffield, managing clerk in the employ of Messrs. Newton, Chambers, and Co., Limited, said he had taken from 10 to 35 drops of the fluid for bronchial affection, and found it beneficial. Mr. George Ellinor, chemist, Sheffield, said he had given it to customers and members of his family, and had taken it himself. Mr. Joseph Birkenshaw, farmer, of Kirkhouse-green, Doncaster, had frequently taken a spoonful in water. In reply to the Coroner: He had never taken four ounces, but had given it to his cattle. Mr. Worrall (chemist to the Company), recalled, said the fluid did not contain phenols. The quantity of oils in the mixture was 30 per cent. of the active body. It was invigorating when taken internally, and warmed the body like cayenne pepper. In reply to the Coroner, Mr. A. Chambers (managing director) said the medicine was of recent (two years) discovery, and they had circulated papers bearing its new registered name, "Izrael." Bottles of the pure oils used in the compound were produced, and then the inquiry was adjourned until the following morning, when Mr. Clegg re-examined Drs. Hamilton and Parker, and both replied that they had not altered their opinion after hearing the evidence of the specialists acquainted with the composition of the disinfectant. Dr. Parker admitted that when anybody died from poisoning, and the tissues were saturated that it tended to preserve the body. Mr. Clegg asked if the fact that the body of the deceased smelled badly did not point to the fact that death had been due to typhoid or rupture of the bowels rather than to poisoning by the disinfectant. Dr. Parker replied in the affirmative in a qualified manner. Mr. Clegg reviewed the evidence at length, and complained of the hasty manner in which the local doctors had formed their conclusions in regard to the death of Mr. Wright. He thought they would have admitted they had been too hasty in giving their opinions, but like other professional men, they

knew that their reputations were at stake and stuck to their previous evidence. He asked the jury to weigh the evidence of the experts as compared with the statements of the doctors, and bring in a verdict that the deceased died from typhoid or rupture of the bowels caused by the exertion of getting out of bed, and not by the disinfectant. The Coroner summed up, and referred to the fact that Dr. Campbell Brown, the County Analyst, had certified that the bottle contained something of the nature of irritant poison, while Mr. Carter Bell differed entirely from him. He pointed out that Drs. Hamilton and Parker had the opportunity of observing the symptoms shown by the deceased, and that their evidence was to be accepted in preference to speculative opinion. He left the jury to consider whether the deceased died from typhoid or poisoning, and then they would consider the question whether or not the firm should limit the quantity of the medicine to be consumed. It simply stated on the label that it was "non-poisonous," and could be taken internally without any detrimental effect.—The jury retired to consider their decision, and after an absence of 35 minutes said they had agreed upon the following verdict:—"We find that Charles Wright died from typhoid fever, and his death was accelerated by the wound in his throat, and by getting out of bed in the manner he did and taking an overdose of the Thornecliffe Disinfectant Fluid."

For the present we will content ourselves by saying that the serious analytical difference of opinion is one that should be cleared up, and for this purpose Dr. Campbell Brown ought certainly to have been called upon to give evidence, which from the report of the inquest does not appear to have been done.

BLACKPOOL AND ITS FOOD SUPPLY.

DURING a visit to Blackpool last summer, we vainly endeavoured to obtain butter, although substances sold as butter were offered to us everywhere. To the eye of the Lancashire millhand taking a holiday it doubtless looked like butter, and was bought as butter by the consumer; but it was a fraud, filthy at that. Weary toilers from Oldham, Manchester, and the numerous towns, whose hard worked cotton-spinners have made Blackpool prosperous, arrived in their thousands, glad to gaze at the magnificent tide dashing up nearly to the tram rails, and to breathe the fresh air, grateful to lungs accustomed to the atmosphere of stifling mills. The Blackpool Corporation offer them advantages enough in entertainments, concerts, winter gardens, piers, and the like. A healthy air they could not, if they would, deprive visitors of, but healthy, pure food they do, and that for the meanest and worst of all reasons—because the local authority is corrupt to the core. It appoints no public analyst or inspector, because its Corporation consists of shopkeepers, lodging-house-keepers, and hotel proprietors, who know the profit to be derived from adulteration, and who take every care to thrive by it. We would like to know how much longer will the meanness of filching 1s. to 1s. 6d. per lb. for sixpennyworth of margarine sold to mill operatives as butter be permitted to exist? Is there no public opinion amongst the 23,846 persons who dwell in Blackpool that will condemn the shameful state of things by which damaged, unsound provisions from all parts are dumped down in Blackpool, to be palmed off as good enough food for the hardworked, Lancashire working men and women? We believe there is, and that it is only from want of thought that it has not exercised itself. Blackpool's near neighbour, Southport, with its 43,026 inhabitants, is no better as regards analyst or inspectors. In both places we have seen unsound hams, the unfitness of which, for food, was disguised by liberal doses of borax, being cut up for food for vast fête crowds. At a miners' demonstration some time ago, held at Southport, cwt. of such food were disposed of. Now we wish to give Blackpool and Southport, and some other equally erring towns, fair warning. They exist by the support of excursionists in a great measure—Blackpool almost entirely, Southport less so, by reason of its residential population. If these and other seaside health resorts will not do right from principle, it must be seen if they cannot be driven to do so by interest; for unless we see prompt steps taken to enforce the Adulteration Acts, and appointments made of both Analysts and Food and Drugs Inspectors, we shall not only cause samples to be taken ourselves, have them analysed, and bring prosecutions by the means of our Special Adulteration Commission, but we shall, through the medium of our own journal, and of as many of the newspapers throughout Lancashire and Yorkshire as are public spirited enough to publish and comment upon such heartless frauds worked on the poor, thoroughly expose the methods by which places like Blackpool are governed, and the quality of its food supply. If such an exposure leads trippers to seek other health resorts where honesty is more general, so much the better for the trippers, and the worse for Blackpool.

A FARMER named Redfern, near Brooklyn, N.Y., has been arrested, and eighty-eight diseased and half dead cattle found on his farm. They had been kept in a filthy pen, fed on swill, and were all found to have tuberculosis. It is said that he has been selling similarly diseased meat in the city for five years past, and that his political influence prevented action being taken until now. No wonder that American cattle are scheduled in England.

BUILDING FAME ON ANOTHER'S NAME.

No one who believes in fairness in trading will regret the decision of Mr. Justice Chitty. Messrs. Huntley and Palmer asked for an injunction to restrain the Reading Biscuit Company, Limited, from so trading as to represent that their business is Huntley and Palmer's business, or that the biscuits which they purpose to make and sell are those manufactured by Huntley and Palmer. Mr. Byrne said he should ask his Lordship to come to the conclusion that the name of the defendant company had been adopted really for the purpose of getting the benefit of the name "Reading," in connection with which Messrs. Huntley and Palmer's biscuits had been so long known. The defendant company was incorporated in January last, for the purpose, as stated on the prospectus, of extending the business of Meaby's Triticumina Company, Limited, by the addition of a factory for the manufacture of biscuits; the directors were the same, the offices were the same, and the interests of the two companies were common. The prospectus referred to the reputation of the town of Reading in the biscuit trade as offering exceptional facilities for carrying on a successful business. Mr. Justice Chitty came to the conclusion that the defendants were attempting to take an unfair advantage of the plaintiffs' reputation, and granted an injunction restraining them from using the word "Reading" in connection with any biscuits not manufactured by the plaintiffs, without clearly distinguishing such biscuits from the biscuits of the plaintiffs. It was not for the court to say how far they might go, or how near, but if they put biscuits on the market without such a clear distinction, they would be liable to the usual consequences for a breach of the injunction.

FERTILISERS AND FEEDING STUFFS.

AN IMPORTANT MEASURE FOR AGRICULTURISTS AND ANALYSTS.

A Bill to amend the law with respect to the sale of Agricultural Fertilisers and Feeding Stuffs, has been introduced by Mr. Herbert Gardner, Mr. John Morley, and the Lord Advocate. We print it verbatim in order that our readers may give it careful consideration:—

A Bill to amend the Law with respect to the Sale of Agricultural Fertilisers and Feeding Stuffs.

Be it enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1.—(1.) Every person who sells for use as a fertiliser of the soil any article manufactured in the United Kingdom or imported from abroad shall give to the purchaser an invoice stating, as nearly as he can, the percentage of the nitrogen, soluble and insoluble phosphates, and potash, if any, contained in the article, and this invoice shall have effect as a warranty by the seller of the statements contained therein.

(2.) For the purposes of this section an article shall be deemed to be manufactured if it has been subjected to any artificial process.

2.—(1.) Where any article sold for use as food for cattle is sold under a name or description implying that it is composed of any particular substance, or of any two or more particular substances, or is the product of any particular seed, or of any two or more particular seeds, and without any indication that it is mixed or compounded with any other substance or seed, there shall be implied a warranty by the seller that it is pure, that is to say, is composed of that substance or those substances only, or is a product of that seed or those seeds only.

(2.) On the sale of any article for use as food for cattle there shall be implied a warranty by the seller that the article is suitable for feeding purposes.

(3.) When any article sold for use as food for cattle is sold as oil-cake, it shall be deemed, unless the contrary is alleged at the time of sale or may be inferred from the circumstances of the sale, to be composed of linseed only.

3.—(1.) If any person who sells any article for use as a fertiliser of the soil or as food for cattle commits any of the following offences, namely:—

(a.) Fails without reasonable excuse to give, on or before the delivery of the article, the invoice required by this Act; or

(b.) Causes or permits any invoice or description of the article, sold by him to be false in any material particular to the prejudice of the purchaser; or

(c.) Sells for use as food for cattle any article which contains any ingredient deleterious to cattle, or to which has been added any ingredient worthless for feeding purposes and not disclosed at the time of the sale,

he shall, without prejudice to any civil liability, but subject to the provisions of this Act, be liable on summary conviction for a first offence to a fine not exceeding twenty pounds and for any subsequent offence to a fine not exceeding fifty pounds.

(2.) In any proceeding for an offence under this section it shall be no defence to allege that the buyer, having bought only for analysis, was not prejudiced by the sale.

4. If any person who is prosecuted under this Act for selling an article which does not correspond to the description given by him at

the time of sale, or contains any ingredient the presence of which makes him liable to a penalty under this Act, proves—

- (a) that he bought the article as corresponding to that description or free from that ingredient, and with a written warranty to that effect; and
- (b) that he had no reason to believe at the time when he sold the article that it was of any other description or contained any such ingredient; and
- (c) that he sold the article in the same state as when he bought it, he shall not be liable to be convicted, but shall, unless he has given notice to the prosecutor of his intention to rely on the above defence, be liable to pay the costs incurred by the prosecutor.

5.—If any person who has been convicted under this Act in respect of the sale of any article used for fertilising the soil or as food for cattle, proves that the article which was the subject of the conviction was sold to him as and for an article of the same description as that given by him or as being free from any deleterious or worthless ingredient, and that he bought it not knowing it to be otherwise, and afterwards sold it in the same state in which he bought it, he may recover by action from the person from whom he bought the article, either alone or in addition to any other damages, the amount of any fine imposed on him under this Act, and any costs paid or incurred by him or incidental to the prosecution or conviction; but the defendant in the action may prove that the conviction was wrongful, or that the amount of costs awarded or claimed was unreasonable.

6. Where any person is liable to pay compensation for deficiency of any ingredient in an article sold by him for use as a fertiliser of the soil, and proves that the buyer was not prejudiced by the variation from the invoice supplied with it, he shall be entitled to set off the value to the buyer of any excess of any other ingredient above the amount specified in the invoice.

7.—(1.) The Board of Agriculture shall appoint a chief Agricultural Analyst (hereafter referred to as the Chief Analyst), who shall have such remuneration out of moneys provided by Parliament as the Treasury may assign.

(2.) Every County Council shall, and the Council of any County Borough may appoint or concur with another Council or other Councils in appointing for the purposes of this Act a District Agricultural Analyst (hereafter referred to as a District Analyst) for its County or Borough, or a district comprising its County or Borough. The remuneration of any such District Analyst shall be provided by the Council, or in the case of a joint appointment by the respective councils in such proportions as they may agree, and shall be paid, in the case of a county, as general expenses, and in the case of a county borough, out of the borough fund or borough rate. The appointment shall be subject to the approval of the Board of Agriculture.

8.—(1.) Every buyer of any article used for fertilising the soil or as food for cattle shall, on payment to a district Analyst of a fee sanctioned by the Board of Agriculture, be entitled, within ten days after delivery of the article to the buyer, to have the article analysed by the Analyst, and to receive from him a certificate of the result of his analysis.

(2.) Where a buyer of an article desires to have the article analysed in pursuance of this section, he shall, in the presence of the seller or his nominee, unless the seller waives his right to be present, take three samples thereof in manner prescribed by the Board of Agriculture, and shall cause each sample to be marked, sealed, and fastened up in such manner as its nature will permit, and shall deliver or send by post one sample to the district Analyst, and shall give another sample to the seller, and shall retain the third sample for future comparison: Provided that a District Analyst shall, on request by the buyer, and on payment of a fee sanctioned by the Board of Agriculture, take the samples on behalf of the buyer.

(3.) The certificate of the District Analyst shall be in such form and contain such particulars as the Board of Agriculture direct, and every District Analyst shall report to the Board as they direct the result of any analysis made by him in pursuance of this Act.

(4.) If the seller objects to the certificate of the District Analyst, one of the samples selected, or another sample selected in like manner, may, at the request of the seller, be submitted to the Chief Analyst.

(5.) At the hearing of any civil or criminal proceeding with respect to any article analysed in pursuance of this Section, the production of a certificate of the District Analyst, or if a sample has been submitted to the Chief Analyst, then of the Chief Analyst, shall be sufficient evidence of the facts therein stated, unless the defendant or person charged requires that the Analyst be called as a witness.

(6.) The costs of and incidental to the obtaining of any analysis in pursuance of this Section shall be borne by the seller or the buyer in accordance with the results of the analysis, and shall be recoverable as a simple contract debt.

9.—(1.) A prosecution for an offence under this Act shall not be instituted except on a certificate by the Board of Agriculture that there is reasonable ground for the prosecution.

(2.) A prosecution for an offence under this Act may be instituted either by the person aggrieved, or by the council of a county or county borough, or by any association authorised in that behalf by the Board of Agriculture.

10.—(1.) For the purposes of this Act the expression "cattle" shall mean bulls, cows, oxen, heifers, calves, sheep, goats, and swine, not horses.

(2.) This Act shall apply to wholesale as well as retail sales.

11. In the application of this Act to Scotland—

(1.) The expression "council of any county burgh" shall mean

the magistrates and town council of a burgh, and the duties and powers of councils of counties and county burghs shall be performed and be exercisable in a county by the County Councils or district committees thereof, and in a burgh by the magistrates and Town Council, and the remuneration of district analysts appointed under this Act shall be paid in the case of a county out of the consolidated rate, and in the case of a burgh out of the police or burgh general assessment.

(2.) The expression "burgh" means a burgh which returns or contributes to return a member to Parliament, not being a burgh to which section fourteen of the Local Government (Scotland) Act, 1889 applies.

(3.) Penalties for offences under this Act may be recovered summarily before the Sheriff in manner provided by the Summary Jurisdiction Acts.

12. For the purposes of the execution of this Act in Ireland, inclusive of the appointment of a chief agricultural analyst, the Lord Lieutenant acting by the advice of the Privy Council shall be substituted for the Board of Agriculture, and the district analysts shall be the analysts appointed for counties and boroughs in Ireland under the Sale of Food and Drugs Acts, 1875, and the additional remuneration of such analysts for their duties under this Act shall be provided in manner directed by the said Act of 1875 and any Act amending the same.

13. This Act shall come into operation on the first day of January one thousand eight hundred and ninety-four.

14. This Act may be cited as the Fertilisers and Feeding Stuffs Act, 1893.

It is, in the main, a well-intended measure, but the trail of the "Warranty" is in it, and would stultify its usefulness even more than has been the case with the Sale of Food and Drugs Acts. Legislators are too ready to assume that the vendors of articles, be they food, seeds, fertilisers or feeding stuffs for cattle, are imposed upon by manufacturers; hence the persistent pernicious introduction of the "Warranty" Clause in Acts intended to suppress adulteration. We have too much evidence that the exact contrary is the case. In the case of milk, we know dealers in London whose contracts with farmers are made that a warranty shall accompany every churn, but the price the dealer pays the farmer is the price of a mixture of 20 gallons genuine milk, 8 gallons separated milk, and 1 gallon of water. This fraudulent milk is just about the quality the Somerset House chemists will pass as genuine, but Food and Drugs Act Inspectors in London know it is no use instituting prosecutions even should Public Analysts certify this milk to be adulterated, because the defendant produces his warranty, and magistrates have no option but to dismiss the summons. The present issue of our journal records an instance of the "Warranty" game in Hartlepool, which the framers of this measure might with advantage study. The "Warranty" Clause fosters fraud, and is injurious alike to the public and the honest dealer. The retailer who is punished for vending an article purchased in good faith as pure, has ample ground for action against the wholesale dealer or manufacturer, and, in fact, our columns only last week recorded such a case. If this measure is to be of any real use, the Warranty Clause must be struck out. Clause 7, we are glad to see, provides for the creation of an independent Chief Agricultural Analyst under the Board of Agriculture. This is a recommendation we have so often made, that it naturally meets with our hearty approval, but the clause for the appointment by County Councils of analysts is weak. One of the causes of the failure of the Food and Drugs Acts is that they are optional. A County or Borough may or may not appoint Analysts and Inspectors, or if such be appointed, the County or other Councils may deliberately *burke* the Acts, as Northampton, Norfolk, Rotherhithe, Cambridge, and a score of places do. No Act save a compulsory one to check adulteration can be worth little more than the paper it is written on. Where Counties or Boroughs will not appoint Analysts and Inspectors, there should be a central authority to compel them to do so, and to take an adequate number of samples of various articles, and having powers, in the event of the local authority refusing to do its duty, to step in and do such duty, charging the cost of same to the local authority. Too many local authorities are notoriously corrupt, and composed of the very class of shopkeepers whom this Act would punish. Left in their hands, the Act would be as the Food and Drugs Acts now are, a dead letter wherever self-interest made it desirable such should be the case.

The appointment of Analysts and Inspectors should also be subject to approval and to termination only by the sanction of the Board of Agriculture. It is only thus that the Inspector at least can do his duty fearlessly. We know too many cases under the Food and Drugs Acts, where, if the Inspector tried to prevent fraud, the Vestry would promptly discharge him, and where, no matter how able and educational be the reports of the Analysts, and the injury that is done by the non-enforcement of the Acts, the Analyst's reports are ignored.

There are many other points raised by this Bill, such as that in Clause 9, making the right of prosecution only by sanction of the Board of Agriculture, and the absence of any real machinery for systematically taking samples by means of Inspectors (which we

have to some extent already commented upon) the strange exclusion of Seeds from the Bill, etc., that want of space prevents our dealing with in this issue. The Bill, however, is in the main well intentioned, and a recognition of the need for the extension of public analysis which we have been alone amongst newspapers in advocating. The fact that we have had so often and so long to condemn the apathy and want of initiative of the President of the Board of Agriculture makes it a pleasure to us to hail this as a step in the right direction, and to hope the good intentions of Mr. Herbert Gardner will be supported, and that all concerned with restoring our Agricultural prosperity will zealously co-operate in making this measure a really workable and beneficial one. We invite the opinions of public analysts upon its clauses.

ADULTERATION PROSECUTIONS.

MILK.

A PECULIAR MILK CASE.

Ellen Sheate, milk seller, of High-street, Brentford, was summoned on June 3rd, by Inspector Tyler for having sold milk which, on analysis was found to be adulterated with added water, and also on a second summons for having sold milk from which the natural fat had been abstracted.—Mr. Ricketts appeared to defend. In this case, which was before the Court three weeks ago, the defendant elected to have samples sent to Somerset House for analysis, being dissatisfied with the certificate of the County Analyst. The Somerset House authorities certified that the sample received was 25 per cent. deficient in natural fat, but with respect to the adulteration question, a certificate could not be given, as the bottle in which the sample was forwarded was not properly corked and the air had entered.—Inspector Tyler said he would call evidence to shew the state of the sample when sent to Somerset House.—Mr. Ricketts said that that could not get over the certificate.—Mr. Tyler said he should clear the County Officers.—Mr. Tarling, Clerk in the Police-court Office, deposed to taking corked and sealed sample of the milk to the Somerset House Official, who, when they were handed in, said they were alright.—The Chairman said that the County Officials were quite clear from blame.—Mr. Ricketts put in a running contract for twelve months, and said that he held it to be a warranty, although the learned Judges had said it was not; why, was only known to themselves. The milk was sent up from Wilts: it had to travel during the night, and had to stand in the yard before being fetched. It had then to stand in the counter pan all day, and when Mr. Tyler took a sample there was only a little in the pan. With the travelling by rail and the standing, some of the cream might evaporate, and no matter how great might be the amount of stirring in the counter-pan the cream would rise, so that a pint or so which was left at last in the bottom of the pan would naturally have lost a lot of its fat. The season had been very dry, which might have an influence on the milk; and as the defendant could not have her sample analysed at Somerset House, she should have the benefit of the doubt. He trusted that under the circumstances—looking at the heavy costs she had been put to—the Bench would deal leniently with her, and say that the alteration was accidental.—The summons for the adulteration was dismissed, and in respect of the other a fine of 40s. and costs was inflicted.

At Edgeworthstown Petty Sessions, Sergeant Magwood, Ardagh, prosecuted Joseph Burns for selling adulterated milk.—Complainant deposed that he entered defendant's house on the 13th May, and purchased half-pint of milk. He made three portions of it. He tendered the third to defendant's wife, which she refused. He forwarded another portion to the analyst, Dr. Tichbourne, report of which he produced.—Mr. Kilkelly read the report, which showed that the milk contained 7 per cent. of water, and 7 per cent. under butter fat. Mr. Kilkelly (to defendant): You could be fined £20. You are fined 10s. and costs.

At Cranbrook Police-court, on June 2nd, Gideon Rumens, milk seller, of Hawkhurst, was summoned for selling to P.C. Lidlow, who was in plain clothes, on the 18th April, a pint of so-called new milk (for which 3d. was charged) in an altered state, whereby the quality of such was injuriously affected.—To this Gideon pleaded guilty, saying he was very sorry, and adding that his son was the regular vendor of the milk, and knew all about it, but on this occasion, when he took his place, somehow his cans got mixed.—The Bench reminded the accused that the penalty was £20, but on this occasion they would order him to pay a fine of 30s., and 11s. costs.

At Greenwich Police-court on the 1st inst., William Hitchman, of 226, South Lambeth-road, Lambeth, was summoned by the Plumstead Board of Works (for whom Mr. G. Whale appeared), for two cases of selling milk at Lee, containing 12·8 of added water, and from which 15 per cent. of fat had been abstracted. The defence was that the boy from whom the sample was taken was not in the employ of defendant, but Mr. Marsham said that no doubt the defendant was liable, and fined him £10 and costs in one case, and ordered him to pay the costs in the other.

At Southampton on the 8th inst., Luke Augustus Oliver, of Shirley, for whom Mr. C. E. Keele (Messrs. Pearce and Keele) appeared, was summoned by Sergt. King (now stationed at Gosport), for selling adulterated milk, at Woolston, on May 15th. The Sergeant deposed to the purchase of the milk, and the certificate by the County Analyst, Mr. Arthur Angell, was produced and read. This stated that the milk contained at least 8 per cent. of added water. Mr. Keele pleaded guilty, and said that his client's answer to the charge was that he

sold the milk in exactly the same condition as he received it from another person. The Chairman said the magistrates considered all cases of this kind very serious, and, taking all the circumstances into consideration, they must inflict a penalty of £3 and costs, altogether £3 19s. 9d.

At Dublin Police-court, on the 7th inst., Margaret O'Brien, 65½, Lower Clanbrassil-street, was fined £10 for selling buttermilk, which was adulterated with 70 per cent. of water over and above the 25 per cent. allowed for churning purposes.

At Merthyr Police-court on the 8th inst., David Morgan, farmer and milk seller, was charged with selling adulterated milk on the 6th May. Mr. J. W. Lewis defended. Superintendent Thorne said that on the 6th of May, he bought a pint of milk from defendant, which he divided and sealed, and told defendant that he intended sending a sample to the Public Analyst, who returned a certificate to the effect that the milk contained 8 per cent. of extraneous matter. Mr. Lewis cited points of law bearing upon the case, and put defendant in the box. He said he was a farmer, and occupied Trebanog Farm. The only way in which he could account for the deficiency in the milk, was because of the recent drought and the dry state of the grass. The Bench thought this excuse was a good one, and dismissed the case.

At Fulham, last week, Thomas Dawson Lomax, of New Crown-terrace, Fulham, was fined 20s., with 12s. 6d. costs, for selling milk adulterated with 10 per cent. of added water. Frank Stride, of Filmer-road, was fined 40s., with 12s. 6d. costs, for a similar offence.

BUTTER.

At Dublin Police-court, on the 7th inst., Jas. J. Reilly, of 7, Dolphin's-barn, was fined £5 for having exposed margarine for sale without having it properly labelled.—Mr. McSheehy prosecuted on behalf of the Corporation, and Mr. O'Farrell appeared for the defendant.

CHEESE.

At Glasgow, on 6th inst., before Sheriff Birnie—John McConnochie, provision merchant, Gallowgate, pleaded guilty to a charge of having on 22nd March, sold to Inspectors Inglis and Murray, 1-lb. of cheese at 6d. which on analysis, was found to contain 18 per cent. of fatty matter not derived from milk, and was fined £4. It was stated, on McConnochie's behalf, that he purchased the cheese from a wholesale firm in Glasgow. It was known by him and by the trade as American cheese, and was invoiced as such.

VINEGAR.

At Fenton, on the 7th inst., before Mr. H. Wright, Potteries Stipendiary, William Bayliss, chemist, Stoke-on-Trent, was summoned at the instance of Mr. Knight, Inspector under the Food and Drugs Act, for selling vinegar which was adulterated with acetic acid not derived from malt. Mr. Fisher (instructed by Messrs. Hand and Co.) prosecuted, and Mr. Gregory (Bristol) appeared for the defence. The County Analyst (Mr. E. W. T. Jones, Wolverhampton) certified that the article sold by the defendant as malt vinegar contained at least 33 per cent. of acid not due to malt, but acetic acid derived from some other source. The defendant having given notice of his intention to challenge the analysis, Mr. Jones was called to support his certificate. Having detailed the result of his analysis, he stated, in cross-examination, that the acetic acid was not the pyroligneous acid, but probably derived from sugar. He never heard talk of distilled malt vinegar as an article of commerce. Distilled malt vinegar would be pure acetic acid. An admixture of eight gallons of distilled vinegar, or acetic acid, and 17 gallons of ordinary malt vinegar, would produce something equal to the sample he had analysed, as near as possible. To distil malt vinegar was an expensive process, but if malt vinegar had been distilled to obtain pure acetic acid, and then that acid had been added to ordinary malt vinegar, it would produce his analysis, and in that case his conclusion that the acid was from some other source than malt was erroneous. But he would still consider that it was an adulteration. For the defence, Mr. Gregory, said that though Bayliss was the nominal defendant, Messrs. Panter, Woodward and Co., of Bristol, who supplied him with the vinegar, were really instructing him to defend. The firm was a large one, of some 150 years standing as vinegar manufacturers, and he should prove that they never used pyroligneous acid, nor any other acid except that obtained from malt. The vinegar was brewed from malt, and then, to meet the taste of their customers, who had the mistaken notion that the darker the vinegar the stronger it was, they coloured it deeply in bulk. It was afterwards diluted down to various strengths indicated by numbers. The strength of the vinegar in question was known as "16," and the defendant having ordered a cask of "16 pale," the manufacturers, in order to bring down the colour, added to seventeen gallons of ordinary "16" vinegar eight gallons of distilled vinegar. It was true this was an expensive method, but there was no other way of doing it. This distilled vinegar was a well-known trade article, largely dealt in by Messrs. Panter, Woodward and Co., who produced it on their own works from their ordinary vinegar. The Stipendiary: Do you contend that the distilled vinegar is not acetic acid? Mr. Gregory: If it is, it is produced from malt, and is more wholesome than acids produced from other sources. We contend that this vinegar is produced solely from malt, and that there is no adulteration whatever.—In support of the defence above set forth, Mr. A. F. Woodward, managing director of Panter, Woodward & Co. (Limited), vinegar manufacturers, Bristol, was called. In cross-examination he said that in brewing their vinegar they used two thirds grain and one-third sugar. Acetic acid would be produced in the process both from the grain and the sugar.—Mr. F. W. Stoddart,

public analyst for Bristol and Salisbury, stated that he had analysed a sample of the vinegar in question, and agreed with Mr. Jones, except in attributing the acetic acid to other sources than malt. He considered it pure malt vinegar. The Stipendiary said he did not think that any fraud on the public was intended, but that the parties concerned had sold what they believed to be a genuine article. But that this was not malt vinegar he was bound to believe from the evidence of the analyst, who was practically supported by the defendant's analyst. The whole transaction, however, was of a genuine character on the part of the manufacturers.—The defendant was fined 5s., with 2s. 6d. costs.—Mr. Gregory intimated that an appeal might be taken, and the sureties were fixed at one in £50, and two in £25 each.

BRANDY.

At the Market Harborough Petty Sessions on June 6th, Wm. Johns, innkeeper, Market Harborough, was charged with a breach of the Food and Drugs Act on May 17th. He admitted having sold weak brandy, but repudiated his liability on the ground that he had a notice on his premises that the spirits sold there were diluted. Supt. Shillcock said he sent to defendant's house for a pint of brandy, and saw defendant, who admitted having sold the brandy. One portion witness submitted to Dr. Emmerson, the county Public Analyst, who certified that it was 38·7 below proof, and therefore 13·7 below the legal standard. Witness did not see the notice referred to by defendant, nor did the latter mention that there was on his premises such notice. Defendant averred that the notice stating that his spirits were diluted had hung up in his bar for five years, and claimed that that being so he could, under the Excise regulations, dilute his spirits *ad libitum*. He was fined £2 (including costs).

MEAT PROSECUTIONS.

At the West Bromwich Borough Police-court, on the 25th ult., before Messrs. F. T. Jefferson and J. Siddons—Thomas Davis, butcher, of Great Bridge-street, West Bromwich, was summoned for having on his premises, on the 14th April, twenty-two pieces of meat which were unwholesome and unfit for the food of man. Mr. Walker (Deputy Town Clerk) appeared to prosecute, and Mr. J. S. Sharpe defended.—The Sanitary Inspector (Benjamin Homer) stated that he and Police-sergeant Hollis visited defendant's premises, where he carries on the business of a beerhouse-keeper, milk-dealer and butcher. They went into the cellar, and there in a vessel they found three tongues, and close by there was a tub containing twenty-two pieces of beef, ranging in weight from 3lb. to 6lb. The tongues were good, but the beef was in a very decomposed state, a number of maggots were upon it, and it was quite unfit for human food. Witness called the defendant into the cellar and asked him what was in the tub, to which he replied that it was meat, and when witness told defendant that he should call the medical officer to inspect it, he added that it was good, and he wished everyone had as good to eat. The meat was conveyed to the Market Hall, and after being condemned by the Medical Officer it was destroyed by the order of a magistrate.—Sergeant Hollis corroborated.—Dr. Manley (Medical Officer) deposed to condemning the meat. Defendant offered to out any piece of meat for him to inspect. Witness asked the defendant, in reply to some remarks by the latter, if the meat was not intended for food, what were they keeping it for? Defendant's daughter replied that they kept it to look at. (Laughter.) For the defence Mr. Sharpe admitted that the meat was bad, but he contended that it was not exposed for sale, neither was it intended to be sold as human food. He explained that the meat was placed in the cellar last summer to pickle for their own consumption. About a month before Christmas a flood occurred in defendant's cellar, and the surface water and sewage matter mixed with the meat which was in the tub. From that time the meat was not touched, not even for their own use. Evidence was given in support of this.—Mr. Jefferson said the Bench considered it was a proper case for the Corporation Officials to bring before them, but inasmuch as the evidence for the defence was sufficient to raise a doubt in the minds of the Justices as to whether the meat was intended for human consumption they gave him the benefit of the doubt. At the same time defendant had shown gross carelessness in the conduct of his business.

At Glasgow on the 31st ult., John Yuill, farmer and cattle dealer, Clachanry, Balfron, was charged with having sent to the Glasgow market, to be sold for human food, a side of beef unsound and unfit for human consumption. The meat was seized at Queen-street Station by Inspector Warnock. The respondent pleaded guilty. He stated that the side of the cow complained of was sent to Glasgow for inspection while he was from home. When he got home he had the other side boiled for the hens. He had no intention of doing anything wrong. Stipendiary Gemmel said he looked upon it as a very bad case, as notwithstanding that the one half was considered only fit for hens' food the other was considered fit for the Glasgow market. But for the fact that, through the absence of the fiscal, the accused had been compelled to attend the Court twice, he would have imposed upon him the highest penalty. He would have to pay a fine of £7, or go to prison for thirty days. Dennis McCashin, ham, butter, and egg merchant, 765, Gallowgate, pleaded guilty—before Bailie Martin—to having exposed for sale 2½ cwt. of broken pork which was diseased, unsound, and unfit for human food. The pork was virtually alive with maggots. Mr. Young expressed the opinion that he had not seen a worse specimen of diseased meat for the past 20 years. Bailie Martin remarked that although the accused have to sell his goods cheap, being patronised by a large number of

poor people, still he must not be permitted to dispose of stuff like this. It being his first offence, he was unwilling to impose the full penalty. A fine of £10 was imposed, with the option of two months' imprisonment. The fine was paid.

At Birkenhead on the 26th ult., before Mr. Samuell, a summons was heard against Henry Wilson, of 1A, Rose Mount, Oxtou, for unlawfully exposing for sale, at 260, Price-street, thirty-five pieces of meat, which upon examination were found to be unwholesome and unfit for human food. Inspector Wagstaffe said he visited the defendant's Price-street establishment at seventeen minutes past ten on the morning of the 19th ult. On the counter he found pieces of mutton, which he examined, and found to be very bad. They were green mouldy. He seized them, and applied to the Court for an order of destruction. This order was granted. In all there were thirty-five pieces, and weighed altogether four and a quarter pounds. Cross-examined by Mr. F. S. Moore, who appeared for the absent defendant, the Inspector said the shop was situated in a low part of the town. The value of the meat when it was fresh would be 3s. 4½d., that was at the rate of 9d. per pound. The meat was seen by the Medical Officer of Health. Mr. Moore said he did not dispute that the meat was unfit for food, but the defendant actually knew nothing of the matter. His manager at Price-street was solely responsible. The meat in question was not the best of meat. The manager of the shop was then called, and bore out Mr. Moore's statement. In answer to Dr. Marsden, he said Inspector Wagstaffe had twice previously seized meat at the shop. On one of these occasions—in 1890—Mr. Wilson was fined £10. Mr. Samuell said it was a pity when a man in a large way of business like the defendant allowed prosecutions of that kind to take place. This shop was in a low part of the town. At his other shops the defendant had a different class of customers, and he was afraid the bad meat, or the meat which was unsold to one class of customers, was brought down for another class of customers, and the very inferior meat was sold to the poor at a low price. There could be no excuse for the meat in the present case being exposed in the shop, evidently for sale. If any poor person had entered the shop and asked for the meat, it would have been sold to them; they would not have been told that it was bad, but their money would have been received for it. People had received blood poisoning and all sorts of diseases through consuming bad food, and the matter was a very serious one. How often meat was exposed in the way the meat was exposed in this case, one could not tell. This case might be only a sample; meat might be exposed in this way frequently. The Inspector could not be on the spot at all times, and as in the case of persons who went stealing and committing other crime, it was not one crime in a dozen that was found out. It might occur very frequently that bad meat was sent to the defendant's shop in Price-street, yet he didn't say this was done, but one had a right to assume. If the defendant's manager did not notice the bad meat, he was not fit to have charge of the place. Defendant had to pay a penalty of £10 and costs.

CENSURE ON A CORPORATION SERVANT.

At the Wolverhampton Police-court, on the 26th ult., before Mr. N. C. A. Neville, Stipendiary, William Smith, cattle dealer of Baker-street, Wolverhampton, was charged with having in his possession the carcasses of a cow and calf which were diseased, and were prepared for sale for the food of man.—Mr. W. L. Bown (from the Town Clerk's office) prosecuted, and Mr. H. Bliss Hill defended.—Mr. Bown stated that on March 8th, a cow and calf were sent by the defendant to the slaughter-house, attached to the Cattle Market, and by his direction they were killed and dressed by the butcher who was kept there. Albert Hodges, one of the Sanitary Inspectors, afterwards went to the slaughterhouse, and saw the carcasses of the animals, which he found were unfit for food. The lungs had been buried in a manure heap, but Inspector Hodges had them dug up, and the lungs and carcasses were seen by the Medical Officer of Health (Dr. Malet). They were subsequently destroyed on an order made by Messrs. C. H. Cousins and J. F. Beckett, two of the Borough Justices. Inspector Hodges having given evidence bearing out this statement, Dr. Malet stated that on examining the carcass of the cow he found it in an extremely emaciated condition. It had been well dressed and cleaned out, but numerous small tubercles were left which showed that the animal had been affected with extreme tuberculosis. The calf was flabby, and had a slight odour, and the meat was in an unwholesome condition. Thomas Tonks, butcher at the Cattle Market, said he killed and dressed the cow and calf, and threw the lungs away because Smith told him to do so. In reply to questions he stated that he was a servant of the Corporation, and noticed the cow had what was commonly called "the grapes," but he did not inform the Sanitary Inspector. He did not know it was his duty to do so, as the Inspector called every day. Mr. Bliss Hill, for the defence, stated that on March 6th, the defendant went to a cattle fair at Wexham, and there bought the cow and calf, for which he paid a fair price, viz., £9 2s. 6d. Mr. Smith, in addition to being a cattle dealer was a small farmer, and he intended to put the cattle on his land and thus prepare them for sale, but the next day he was going to another fair at Shrewsbury, and was told the cattle had arrived from Wexham, but had been bruised in the cattle truck. Mr. Smith, therefore, had them sent to the public slaughter-house. The carcasses remained in the slaughter-house the whole of that day and also the next, when the defendant on being told that they were diseased, sent for his veterinary surgeon, because he previously had no knowledge of any disease.—Mr. E. Beddard, veterinary surgeon, said he examined the carcasses. They were very thin and in a poor condition, but the meat looked perfectly healthy and, as far as he could see, he could not detect any disease in the meat. When he saw the lungs,

however, and saw that they were diseased, he condemned the carcasses. He did not think the defendant could have known that the meat was diseased.—Mr. Neville said the man Thomas Tonks apparently killed the cow and calf in such a way as to take the evidence of the cow being diseased as far away as he could. He also concealed the lungs in a heap of manure, although he had said he did so at the suggestion of the defendant. He (Mr. Neville) thought Tonks was quite as bad as the defendant, and if the servants of the Corporation conducted themselves in a manner like Tonks, it was a very bad look-out for the people of Wolverhampton. It was simply using the slaughter-house as a trap for the purpose of purveying diseased meat in the Borough. He could not act on the evidence of Tonks, and the case would be dismissed.

Henry M'Millan, fletcher, Castle-street, Forfar, was charged in the Forfar Police Court on the 29th ult., before Bailies Falconer and M'Dougal, with having, on 16th May, in No. 6 killing-booth in the Forfar Slaughter-house, had in his custody the carcass of a cow intended for human food, which carcass was diseased. Chief Constable Stirling stated that on the day mentioned the keeper of the slaughter-house apprised him of the fact that a carcass had been brought in by M'Millan which was intended for human food. Together with Dr. Murray he visited the slaughter-house, where they met accused, and asked him if he intended the carcass for human food. "Yes," M'Millan replied. On inspection of the carcass they discovered that it was diseased and unfit for human food. Prisoner demurred to the condemnation and Mr. Stirling sent for Mr. Anderson, V.S., who, on examination, also stated that the carcass was diseased. They were very much annoyed with men bringing old cows to the slaughter-house, and trying if possible to get them passed, and sent into the market for human food, a practice which ought to be smartly dealt with. He had seen Mr. Watson, crofter, Caldham, from whom Mr. M'Millan bought the cow, and that gentleman told him that accused represented the cow as being bad, and bought it from him for £1. He thought that the case should be dealt with in a manner which would deter M'Millan and others from engaging in such a practice. It would not do for fletchers to bring into the shambles dressed meat without the liver and lungs for inspection. M'Millan: I had plenty of time to put it to the station, and send it on to Dundee. Bailie Falconer: If you had sent it to Dundee and the animal condemned there? M'Millan: There would have been no consequences. I will pledge you that Mr. Stirling will never get the same chance of charging me again on a similar complaint. Bailie M'Dougal: What value would you have put on the animal if it had been healthy? M'Millan: About £14. Bailie M'Dougal: Then do you think you could have bought it for £1 if nothing had been wrong with it? M'Millan: I have bought a beast worth £5 for £20. The Chief Constable: The people in Dundee are just the same to me as the people in Forfar. The people in Dundee must be protected, and we look to Dundee to protect us in the matter of diseased meat. M'Millan: The folk from whom I got the beast kept the head, heart, liver, and entrails, and ate them. Bailie M'Dougal: In the event of killing a beast of this description, and sending it to the Dundee or Glasgow markets, does the carcass go to the dead meat market at once or is it first inspected? The Chief Constable: If the carcass is sent to the dead meat market it is inspected, but if it is sent to a fletcher the Inspectors may visit the shop and see it, but these officials can't be expected to be in a particular shop every hour of the day. Bailie M'Dougal: If it was M'Millan's intention to submit the carcass for inspection, it is a point in his favour. The Chief Constable: He did come and ask me to inspect it, but told me it was intended for human food. M'Millan: I never saw anything wrong with it whatever. The Chief Constable: How then did you make such a bad representation of the animal to the man who owned it. M'Millan: Just because I wanted to make a bargain, and I wanted to make a pound when I could get it. (Laughter.) The Bench passed sentence of a fine of one guinea, with the option of ten days in jail. M'Millan got four days in which to pay.

Albert E. Bramwell, butcher, Finedon, near Wellingborough, was charged at the Guildhall, London, with having sent to the Central market the carcass of a sheep which was diseased and totally unfit for human food.—Mr. Vickery, who prosecuted on behalf of the Commissioner of Sewers, said this was about the worst case that had ever come before a court of justice. Evidence would show that it was dressed as a lamb, that it was in a filthy condition, the weight being 24 lb., whereas were it healthy it should be 56 lb. The defendant, being a butcher, should have known its condition, and no doubt did know, as when he had sold the skin, &c., the sheep cost only 6d.—Dr. Sedgwick Saunders said he had examined the meat. The animal had suffered from a wasting disease, and it was the worst case of the kind he had ever seen. Eating such stuff might be attended with serious results.—Mr. Ald. Moore hesitated whether he should not send the defendant to gaol without giving him the option of a fine. He had, however, previously held a good character, and taking that into consideration, the alderman said he would give him the option of a fine, but it would be the maximum one of £50, and £2 2s. costs.

WORTHY OF THE MAYOR OF BEDFORD.—A mayor of a town in England, according to an American electrical contemporary, in a recent address, spoke of the civilising effects of the advances of science, and among other things suggested "that the lines of latitude and longitude should be taken up and replaced by submarine cables!"

THE QUEER LARD CASE.

THE "WARRANTY" AGAIN."

Mr. B. Scott Elder has shown a keen regard for the public wellbeing by his spirited action in the lard warranty, referred to in previous issues of this journal.

It will be remembered that in March last the Durham County Authorities issued several summonses against the Ryhope Co-operative Society for selling lard which was adulterated with beef stearine. The cases were heard at the Petty Sessions in Sunderland, when the defendants pleaded that they had bought the lard from Messrs. Furness and Co., of West Hartlepool, on a written warranty. After a lengthy hearing the magistrates dismissed the case on the defendants paying costs, immediately upon which Mr. Scott Elder, the County Inspector, gave an intimation to the Bench that the case would be carried further. Since then the County authorities have taken out a summons charging Messrs. Furness and Co. with selling the lard on a false warranty, and the case came on for hearing before the Newcastle magistrates. Mr. Iliff (Messrs. Simey and Iliff, John-street, Sunderland) was for the County authorities, and Mr. Thos. Lambert represented the defendants.—On the case being called Mr. Iliff, addressing the justices, explained the previous proceedings taken in Sunderland against the Ryhope Co-operative Society, and remarked that that case had been brought to Newcastle in consequence of the lard having been sold there. He understood that since the issuing of the summons the defendants had disposed at a sacrifice of all the adulterated lard they possessed, and were willing to give an undertaking that day to the magistrates that in the future they would discontinue using beef stearine in manufacturing lard, in which it had been previously pleaded it was only put in for stiffening purposes. The prosecution were willing, if the magistrates thought fit, on that undertaking being given and the costs of the proceedings being paid, to allow the case to be withdrawn.—Mr. Lambert, on behalf of Messrs. Furness and Co., then gave this undertaking, and the magistrates allowed the case to be withdrawn on payment by the defendants of the costs.

We do not know if Mr. C. Furness, M.P. for Hartlepool, is the head of this business or is connected with it, but we shall be curious to see what attitude Mr. C. Furness, M.P., adopts towards the other Sir Charles Cameron's Bill, which would make the *invoice a warranty, and provide no means of doing what Mr. Scott Elder has here successfully done—punishing the manufacturer.* Cases like this throw light on the real objects of the supporters of the misnamed Food and Drugs Act Amendment Bill.

A BACKER OF SIR CHARLES CAMERON, M.P., PRESENTED AT COURT.

MR. F. C. FRYE, M.P., FINED UNDER THE PHARMACY ACTS.

Mr. F. C. Frye, M.P., is a representative of North Kensington in the House of Commons, and is also a persistent "lobbyer" for Sir Charles Cameron's wretched bill. We have a suspicion that Mr. Frye, M.P., was presented at Court before, but anyhow, Mr. O'Donel, chief divisional magistrate Northern Divisional Court, Dublin, received him a fortnight ago, when Frederick Charleswood Frye, of the firm of Messrs. Leverett and Frye, grocers, was charged at the suit of the Pharmaceutical Society of Ireland with having, at Sandymount Green and Amiens Street, sold and kept open shop for retailing and dispensing poisons within the meaning of the Pharmacy Acts, Ireland. There were summonses in respect of three offences, the articles sold being Browne's Chlorodyne and Winslow's Soothing Syrup. Proof of the sales having been given, and evidence to the effect that the preparations contained poison and were not patent medicines. Mr. O'Donel said that there must be convictions in these cases. The bottles contained poison, and it was a monstrous thing to think that poisons could be sold save by properly qualified persons. It could not be tolerated that the ordinary grocer should sell poisonous matters over his counter. The defendant must pay a penalty of five pounds in each case. On the application of Mr. Clay, the sum of two pounds was allowed as costs in each case.

Of course the distinguished legislator's rank was kept out of the papers, but we give it because this case is brimful of meaning as illustrating the objects of the clique who are trying to work Sir Charles Cameron's bill to amend the Food and Drugs Acts, through the House of Commons; and in the hope that members, who, without a full grasp of the real character of the bill, have promised it their support, will ponder on the fact that every authority concerned with suppressing adulteration, has absolutely condemned the bill as one that would stultify the Acts and make them unworkable.

Mr. N. G. Fish Petherton has been selected out of twenty applicants, for the post of Sanitary Inspector at Yeovil, and begins his duties on June 25th.

THE *Other* SIR CHAS. CAMERON AND HIS BILL.

THE other evening to a meeting of grocers, Dr. Cameron said the opposition to his Bill was "pure cussedness." It is interesting therefore to see how other journals regard the Free Fraud bill. *Industries*, June 10th, says:—

"THE SALE OF FOOD AND DRUGS ACT.

"Dr. Cameron's Bill to amend the Sale of Food and Drugs Act has been petitioned against by several vestries and local authorities, and it is to be hoped that the Bill will be referred to a Select Committee to take evidence from those interested in suppressing adulteration as to what modifications of the existing laws are necessary. The warranty plan advocated in Dr. Cameron's Bill, whilst protecting the retail trader will not prevent fraud. It will, on the other hand, render it still more difficult for local authorities to reach the unfair traders and those who are existing by fraudulent manufacture of food stuffs. The difficulty lies in the fact that if the present Bill became law the trader summoned by a local inspector would be exonerated if he produced his invoice, which is to be regarded as equivalent to a warranty, whilst no means are provided for prosecuting the wholesale firm supplying the goods. What is really wanted is power to deal with these wholesale firms, as under the existing Act the retail dealer has often to suffer for the sins of the wholesale vendor. Dr. Cameron's Bill would, however, render it possible for both classes of dealers to escape without punishment.

"We hope our readers will urge their parliamentary representatives and local authorities to see that the matter is not shelved but dealt with in a way which will give our home industries an opportunity of competing fairly with foreign manufactured food-stuffs."

In which hope we cordially join.

THE DILUTION OF SPIRITS QUESTION.

IMPORTANT CASE AT WOLVERHAMPTON.

THE able energetic Food and Drugs Act Inspector for Staffordshire has done a public service by his action on May 31st at Wolverhampton Borough Court. The magistrates were C. F. Clark and G. B. Thorneycroft, before whom Mr. J. E. Morris summoned Charles Askew, of the Brown Lion Inn, Oxford-street, Bilston, charged with selling adulterated rum. Mr. J. E. Morris, county inspector, prosecuted, and Mr. Loxton (Walsall) defended. A half-pint of rum was purchased at the defendant's house for 1s., and on analysis was found to contain 19 per cent. of added water, which made it 38·6 under proof, instead of 25 allowed by the Act of Parliament. For the defence, it was contended that a notice was hung up in the house that all spirits were diluted according to the Excise regulations, and this was a good answer to the case. The magistrates dismissed the case, but in response to Mr. Morris's application, they granted a case for the Queen's Bench.

This Somerset House fostered imposition upon the public of a dilution notice has had far too long a run. The percentages are clearly stated in the Acts, and the Staffordshire County Council and Mr. Morris do excellent work in the protection of the public from fraud by raising the question.

THE RIGHTS OF INSPECTORS.

In the Court of Queen's Bench on Friday, the 19th ult., the case of *Payne v. Hack* came on before Justices Bruce and Kennedy. This was an appeal against a decision of some magistrates in Hampshire. —Mr. Paterson was for the appellant, and Mr. Bullen and Mr. Gore Brown for the respondent. —The appellant kept a public house, the *Britannia*, in Station-street, Lymington, and the respondent was a police-officer, who, having attained to a certain position, became, under a resolution of quarter sessions, an Inspector under the Sale of Food and Drugs Act. He went to the house of the appellant, had three-pennyworth of rum, and then asked for a half-pint more, saying that he was an Inspector, and required the liquor for analysis. The three-pennyworth was taken from a bottle, but the appellant was about to take the half-pint from a jar. The respondent demanded that the half-pint should come from the bottle whence the three-pennyworth had come. The appellant refused to comply with this request, and he was summoned before the justices for having unlawfully refused to supply the Inspector with liquor. He was convicted of this offence, and it was this decision of the justices that was now appealed against. —The Court, without hearing Counsel for the respondent, held that the respondent was not bound to produce his authority to act as Inspector before he could establish a charge that he had been unlawfully refused a supply of rum. Another contention of the appellant was that the respondent had no right to demand to be served with rum from any particular vessel. As to this, the Court was of opinion that, though he might not have so large a right as this, yet he could demand rum from the same bottle that he had been previously served from. —Appeal dismissed, with costs.

At the last meeting of the Yeovil Board of Guardians Dr. Colmer remarked that there was at present a case of typhoid fever in the village. Mr. Doswell, Inspector under the Housing of the Working Classes Act, reported that a house at Montacute belonging to Mrs. Dalwood, containing two bedrooms, was inhabited by a man and his wife, two sons, and four daughters, all grown up. The two sons and the four daughters slept in one bedroom.

PUBLIC HEALTH PROSECUTIONS.

INSANITARY PROPERTY AT WEST BROMWICH.

At the West Bromwich Police Court, on the 5th inst., Benjamin Field, Hill-top, was summoned by the Town Council to abate a nuisance at property 'at Long-square, Hill-top. Mr. A. Caddick (Town Clerk) prosecuted, and the defendant not appearing, the case was heard in his absence. Mr. Caddick mentioned that the case had been adjourned twice to allow defendant an opportunity of doing the work, but he had not done it. Mr. Hornes (Sanitary Inspector) deposed to visiting the property on January 16, when he found the ashpit uncovered, there was no proper drainage to the property, while the roofing and paving of the yard were defective. An order was made for the work to be done at once. —Defendant was also summoned with respect to other property opposite, which was in an insanitary condition, and an order was made for this work to be done. —Annie Hammond, Windmill-street, Wednesbury, was summoned in respect of property situate in Long-square. In this case the evidence showed that the ashpits and privies were in a foul and dilapidated condition, while some of the sewage was running into the street. An order was made for the work to be done in 14 days.

OVERCROWDING AT DUDLEY.

Henry Pittaway, builder, Himley-road, had an order made upon him at the Police Court on the 5th inst, to abate a nuisance of overcrowding at a house belonging to him in St. John's-street, Kate's-hill, and occupied by a man named Benjamin Shaw. Evidence was given to show that the house had but two rooms, one up and one down, and that there slept in the bedroom—15ft. by 12ft. and 7ft. high—eight persons: the husband and wife, three sons, and three daughters. The eldest son was 18, and the eldest daughter 17. —The Borough Surveyor (Mr. Gammage) said the superficial area was 117 cubic feet for each person, whilst there should be at least 250ft. —Dr. Higgs: There ought really to be 300ft. The defendant pleaded that after repeated trials he had failed to get the people out.

HOW SCARLET FEVER IS SPREAD.

At Ludlow Police Court, on June 1st., Ann Howells, Taylor's-court, was charged under the 126th Section of the Public Health Act, 1875, with exposing her female child in the public streets whilst suffering from a dangerous and infectious disease, viz. scarlet fever, without proper precautions against the spreading of the said disease, on the 1st of May. Dr. Thursfield, Medical officer of health for the borough, appeared to prosecute on behalf of the Ludlow Sanitary Authority, and said he did not wish to press for a heavy penalty. He received a notification and visited the house occupied by defendant in Taylor's-court. He found the house locked up, and the neighbours told him that the woman had gone to the Fair. He found it was common talk that the child was suffering from scarlet fever. He sent three messengers to find defendant, and she came down and opened the house, and he examined the child and found it suffering from an attack of scarlet fever. He cautioned her. Sergeant Humphreys proved seeing the woman out in the streets on the Wednesday. Dr. Thursfield said that the defendant did not, no doubt, understand the gravity of the case by taking the child out, and a small penalty would meet the case, as they wished to bring this case before the public. The Bench said defendant had been guilty of a serious offence, but perhaps she did not know the danger of the case, and they should deal leniently with her and fine her 2s 6d, including costs.

HOW SMALL-POX SPREAD IN GLASGOW.

On the 30th ult., Mrs. Harriet James, 31, Bank-street, Hillhead, was charged at the instance of the Local Authority under the Public Health Act, with having on Saturday, 28th April, or as soon thereafter as she became aware that Robin A. Crabb, inmate of her house, was suffering from small-pox, failed to send notice to the medical officer of health of the district, whereby she was liable to a penalty of 40s. Mrs. James pleaded guilty.

Mr. John Lindsey, assistant clerk of police, said that it was the first case in Glasgow under the Act. A servant girl in a house in Hillhead, left her situation and went to this woman's house to stay. After she was in the house she took unwell with what was ascertained to be small-pox. No intimation was given to the Sanitary Authorities, but from information received by them they visited the house. Mrs. James denied that the patient was in the house, and made other misstatements as to the number of her family and lodgers. The Sanitary Inspector continued his inquiry, and, on going back in the afternoon, discovered that a doctor had been sent for in the interval. Mrs. James then admitted that she had told what was not true to the Sanitary Authorities before, and the patient was seen and removed to the hospital. One of the days when the patient was denied being in the house she was visited by a fellow-servant in the house where she used to serve. That fellow-servant said to Mrs. James that she felt a strong smell of carbolic acid, and Mrs. James asked her to say nothing about it. A few days afterwards, that fellow-servant, who had simply stood at the door, was removed to the hospital suffering from small-pox, and had only just been liberated. A further development was that two neighbours in the same land were attacked by small-pox, and were still in the hospital. When the authorities ascertained definitely that the patient was suffering from this disease, they had her at once removed, and all the inmates revaccinated, but owing to the concealment of this case, three other cases of smallpox had arisen.

In reply to the Sheriff, Mr. Lindsey said that the respondent had a house of two rooms and a kitchen. She had two sons who worked in town, and a daughter who also worked in town, and at

the time of this complaint she had two lodgers, one of them being this patient and another a girl who was a waitress in a public restaurant in town.

The Sheriff said it was a bad case. The penalty was certainly not excessive, but owing to the number of people who, through the concealment of this case, and the respondent's remissness, had got this unfortunate disease, she must pay 40s. or go to prison for 7 days.

Mrs. James—I will go to prison. I cannot pay it.

The Sheriff—You will be allowed ten days to pay the penalty.

THE BANDON UNION AND SANITATION.

At their last meeting Mr. Thomas O'Callaghan, T.C., Shannon-street, wrote complaining of the unsanitary and dangerous state of the drain at the rear of the houses in the northern side of that street.

The Clerk said that some time ago the Board decided to extend the existing drain, but, on advertising for tenders at the time for the work, none were received.

No action was taken in the matter.

Dr. Welby reported that every description of filth is thrown close to the fountain in Watergate-street, and, as the accumulation is a public nuisance, he recommended that it should be removed immediately, and that people should be prevented from depositing refuse in the place. It was also desirable that a paved gutter should be constructed from the fountain to the river.

It was decided to carry out these recommendations.

Dr. Welby also called attention to the offensive smell issuing from the sewer near the courthouse, and recommended that a trap should be fixed over it.

This was also agreed to.

Dr. Meade, medical officer of the Templemartin dispensary district, reported that the water-closets attached to the Crookstown and Kilorea stations on the Macroom railway line, are in a very unsanitary condition, and recommended that the guardians should compel the railway company to carry out certain improvements in both places.

It was decided to adopt these recommendations.

THE SANITARY CONDITION OF THE EARL'S COURT EXHIBITION.

The Kensington Vestry have been compelled to take stringent measures against those connected with the World's Water Show at Earl's-court. The Vestry's Surveyor had been trying to obtain from the Secretary and Engineer at the World's Water Show, plans of the drainage and sanitary works for the approval of the Vestry, but the World's Water Show people had been unable or unwilling to show any plans whatever. Recognising how dangerous it would be to the public health were the sanitary works or the drainage of so large an Exhibition as that at Earl's-court to be in an unsatisfactory state, the Works Committee of the Kensington Vestry have given directions for a notice to be served for the opening up of the drains at the exhibition, and for a thorough examination of the same being made, and any defects will be compulsorily dealt with under the Metropolis Management Act. The Vestry and officials deserve well of the public for their promptness. The character of the soil dug out for the Water Show was the worst of refuse tipplings, animal matters, etc., and the state of the soil, aided by sanitary defects, might readily cause outbreaks of disease.

PUBLIC HEALTH NOTES.

THE ABERDEEN DAIRYMEN AND PUBLIC HEALTH.

The Public Health Committee of the Town Council have been considering a statement of grievances set before them by dairymen in the Aberdeen district. Since the extension of the city boundary, the dairymen in the district have felt it to be a grievance to be compelled to give every cow in their byres 800 cubic feet of space. They laid the matter before the Public Health Committee some time ago, requesting that for their old byres the authorities should be content with an allowance of 700 feet per animal. The matter was considered by the Committee, when, after discussion, a vote had to be taken on the matter. The majority of the Committee held that, having regard to the public health interest, and to the pure quality of the town's supply of milk, they could not allow the existing regulations to be departed from, and this, by 5 votes to 3, became the finding of the meeting. Several further points put forward by the dairymen were left in the hands of Mr. Cameron, Sanitary Inspector.

THE DRAINAGE OF HAMBLEDON (SURREY) UNION.

Dr. Napper says, there is still great difficulty in many parishes in disposing of sewage and refuse. The earth closet system continues to work well. Greater care should be taken to properly dispose of refuse matters on small premises, or the well water must become polluted. Drainage schemes are required for Bramley, Shalford, Milford and Womersley, and that at Haslemere should be perfected. All cesspools should be systematically cleansed, and in crowded places a public system of emptying adopted, or earth closets substituted, and should in all cases be built in good cement. Ash-heaps and slush-holes are very frequently placed close to the beds. Poultry and rabbits kept on small premises are a nuisance. The water supply

is much improved. I sincerely hope the Board will never rest from their labours in this matter until they have provided a plentiful supply of good pure water for all. It is useless trying to carry out Notification of Infection Diseases Act unless you have an isolation hospital. In his report for the last half of the year Dr. Hall, the present Medical Officer of Health, states that fourteen deaths were recorded from the principal zymotic diseases, and this gives a death-rate of .75 per 1,000 from zymotic disease for the half-year. Scarlet fever has been more or less prevalent in one or two parts of the district; there have been also several cases of diphtheria and enteric fever. The drainage of the district is in some places still imperfect in the disposal of sewage matters. Greater care is required in selecting the position of drains, cesspools, pigsties, &c., as they are too often carried near the water supply, which may become polluted in consequence.

There is apparently work for Sanitary Engineers in the Hambledon district.

MORE WAGES OR FOULER AIR.

The labourer who was reported to have struck for more work or less wages, has been matched by some dressmakers who complained, says a recent writer, "of too much fresh air being supplied to a stuffy workroom in which a number of them were employed. The dressmakers stated that the fresh air increased their appetite, and requested an advance on their wages or restoration of the close atmosphere; but here is the sequel: it was found that they were able to turn out a greater quantity of work with the fresh air conditions than without them, and that more than compensated the employer for the increased expenditure." The lot of the poor sempstress must be indeed wretched if there be any truth in this strangely pitiable tale.

CORK AND PUBLIC HEALTH.

We commented on the apathy of the Cork authorities in respect to Dr. Cameron's Free Fraud Bill to amend the sale of Food and Drugs Act, which would destroy the Cork butter trade. The authorities seem as remiss in Sanitary matters as in the Food and Drugs Acts. At their last meeting—

Mr. William O'Connell appeared before the Public Health Committee to strongly complain of the unsatisfactory state of Blarney-street, near which his residence was situated. He objected to the keeping of pigs, the absence of water closets and drainage in a large number of the houses, and was of opinion that it showed criminal neglect on the part of the Sanitary Officers. Mr. Galvin (Executive Sanitary Officer), said that a number of residents in the place has been summoned to put their houses in a sanitary condition. For some time the sanitary authorities were taking stringent measures to abate the cause of Mr. O'Connell's complaint. Mr. O'Connell said he would take Counsel's opinion to ascertain whether he could take legal steps to compel the Sanitary Officers to do their duty. Mr. Galvin said the alleged remissness was the fault of the Committee. Mr. O'Connell said that was more unjustifiable on the part of the City Fathers than on the part of the Sanitary Officers. Dr. Donovan, Medical Superintendent Officer of Health, said the unsanitary condition of Winter's Hill had occupied the attention of the Committee for some years. A good deal of blame rested on the Committee, but it should also be taken into consideration that legal proceedings against people occupying unsanitary premises were not always successful, while the subsanitary officers had a great deal of difficulty occasionally in bringing people into court. The chairman informed Mr. O'Connell that his complaint would be attended to, and it was decided to direct the City Engineer to report as to the cost of extending the sewer so as to bring it into connection with Winter's Hill.

This unhealthy Health Committee appears to consist of a Mr. T. Farrington, Councillor W. Hosford, E. Casey, and J. L. Bogan.

THE HARTLEPOOLS AND CHOLERA.

At the last monthly meeting of the Hartlepool Port Sanitary Authority, it was decided that in case of an outbreak of cholera on the Continent, the bay be used as a quarantine station, and if rough weather necessitated it, infected vessels should be allowed to enter the port. In moving this the Chairman stated that the consent of the Customs and Pilotage Authorities had been obtained. Telegraphic communication is to be established between the Exchange Company's Central Office and the Inspector's office at Middleton.—A letter was read from the Hartlepool Corporation sanctioning the use of a plot of land at the north-west end of the cemetery for cholera burials should the necessity arise.

THE INSANITARY STATE OF TIPTREE.

A correspondent of the *Essex County Chronicle* writes a strong condemnation of the authorities, which, if justified, is shameful to those at fault. He asserts that—

Not very long ago it was stated by one, who should be in a position to speak authoritatively, that the district of Tiptree had narrowly escaped an epidemic of diphtheria, and that cases of diphtheria are constantly occurring. It is not surprising that such is the case. I passed through that district a few days ago, and from what I noticed then I should say that the danger is not yet over. I saw and smelt an open ditch filled with extremely foul odorous black matter, which extends for some hundreds of yards and finally empties itself into

a large pond near the main road. Upon inquiry I was told that it had existed for some time, and was so offensive, especially in hot weather, as to be positively unbearable in those directions to which the wind carried the stench. Complaints have been made to the Sanitary Authorities, but the nuisance still continues.

THE CONDITION OF THE THAMES.

The Chiswick Local Board have resolved to send to the Thames Conservators a copy of a memorial which they have received from inhabitants of the district, calling attention to the accumulation of mud and putrid matter on the foreshore of the river. This, it is alleged, is so great a nuisance at low water as to cause a most offensive smell, likely to be injurious to health. The Local Board have been asked to take immediate measures to remove the nuisance. The Conservators are now asked to attend to the matter without delay. For some weeks past the Thames from Teddington Lock to Kew Bridge has been remarkably shallow at low water, and the bed of the river has been exposed in many places. The accumulation of mud on the foreshore of the river is not confined to Chiswick. What with "houseboat" and other abominations, the Thames in parts is becoming worthy of Coleridge's famous lines on the City of Cologne, noted for its splendid cathedral, and for the lovely scent, *Eau de Cologne*, as follows:—

"In Coln, that town of monks and bones,
And pavement fanged with murderous stones,
And rags and hags, and hideous wenches,
I counted two and seventy stenches!
All well defined and genuine stinks!
Ye nymphs that reign o'er sewers and sinks,
The river Rhine, it is well known,
Doth wash the city of Cologne;
But tell me nymphs, what power divine
Shall henceforth wash the river Rhine?"

It is time the houseboat nuisance and sewage pollutions were stringently dealt with.

DISGRACEFUL DROGHEDA.

At the last meeting of the Corporation, the Local Government Board wrote enclosing a form of certificate to be filled by the Inspector appointed under the Food and Drugs Act. It was mentioned that there was no appointment made; and the Town Clerk was instructed to write enquiring if there was an appointment, who was to pay.

And yet members of Irish Corporations lament the injury done to the Irish butter trade by the fraudulent sale of margarine whilst they ignore the Acts of Parliament that would stop such frauds and benefit Irish industries. Altogether a curious study in corporate ignorance.

THE RESULTS OF OUR AGITATION.

The *Grocers' Journal* says:—

"For the past three weeks the receipts of butter at the Cork Butter Market have shown a steady increase. The merchants regard the fact as most encouraging, inasmuch as it shows an increased confidence in the market. The recent agitation has been productive so far of good results, and not alone are the farmers supplementing their ordinary supplies, but a most marked improvement is observable in the quality of the different classes. It is some time now since the trustees have found it necessary to institute legal proceedings against farmers for fraudulent packing of butter, and it is earnestly hoped that the improvement here noticed will steadily advance, and that the market after a time will have regained its *prestige* of past times both in England and on the Continent."

MEDICAL OFFICERS' REPORTS.

ISLINGTON.

Dr. Alfred E. Harris, in his report to the Islington Vestry for March, says that the seven principal zymotic diseases gave 45 deaths, which were equal to an annual rate of 1.44 per 1,000 of the population. There was no death from small-pox. Dr. Harris reports a curious magisterial decision:—

"UNSOUD FOOD.—On March 17th an important case was heard at the Clerkenwell Police-court, when the Vestry prosecuted the owner of a licensed slaughter-house for having the carcass of a diseased cow in preparation for sale on his premises. The beast suffered severely from tuberculosis, and when seized, the carcass was wet, flabby, and unwholesome. It was dressed and apparently ready for sale. The defence was that the animal had been sent there by the Great Northern Railway Company, on whose line it had met with an accident, for the purpose of having a *post mortem* examination made on it to discover the cause of death. The Magistrate was satisfied as to the *bona fides* of the defence, and dismissed the case, and, under the circumstances, he could hardly have done otherwise. Nevertheless, it appears strange that an animal that was not intended for food should have been sent to a slaughter-house, and that it was dressed in the ordinary way. It was not necessary for the purpose of a *post-mortem* examination to so dress it. Indeed, for obvious reasons, this would rather defeat the purpose of the examination

than otherwise. The proper place for animals, like this one, to be taken to is the knacker's yard, and it is to be hoped that in future they will be taken there, particularly as there is one in the immediate vicinity. This was the second time this person was prosecuted for this class of offence."

Incidentally the report shows the encouragement magistrates give to fraud.

"Four persons were prosecuted for adulteration milk, and fines varying from ten to twenty shillings and 12s. 6d. costs were inflicted. In one case, however, only 2s. costs were allowed."

ANALYSTS' REPORTS.

EAST SUFFOLK CITY COUNCIL.

The *East Anglian Daily Times* says:—

The analyst's report was brief and inconsequential, as usual, and the fact has at last come under the notice of the authorities above. The Local Government Board wrote that they had regretted to observe that during two years "no samples were submitted by county officers for analysis under the Sale of Food and Drugs Acts, and that they must call the attention of the County Council to the importance of carrying out these Acts effectually."—Alderman A. C. Pretymann said the "county officers" referred to were an invisible authority—(laughter)—about whom he should like to have some explanation.—Alderman Lomax said it was really a police question.—Mr. H. Cooper said it was a very important question, which had been too long neglected. It had been found that some of the stuff sold as butter in the county contained from 70 to 80 per cent. of fat, and it need hardly be wondered at, therefore, that British farmers were unable to stand against competition so unfair. English fat was sold for 2½d. per lb. to be exported, and was returned in the form of margarine and actually sold as butter.—On the motion of Colonel Buxton, seconded by Mr. H. Cooper, the complaint of the Local Government Board was referred to the Standing Joint Committee.

THE STAFFORDSHIRE COUNTY COUNCIL.

The analytical work done during last quarter under the above-mentioned statutes for the district is summarised in the attached tabulation submitted to the County Council for Staffordshire by Mr. E. W. T. Jones, F.I.C., County Analyst:—

From North Staffordshire I have received 142 samples, of which 129 were genuine and 13 adulterated.

From South Staffordshire 162 samples have been submitted, of which I have found 137 genuine and 25 adulterated.

For the whole county jurisdiction I have had 304 samples to analyse—266 I have found genuine and 38 adulterated, an adulteration percentage on the samples analysed of 12.5 against 8.62 for last quarter; the higher rate of adulteration is mainly due to the attention paid to vinegar. As I mentioned last quarter, these ups and downs in the percentage of adulteration for short periods like a quarter will often occur as new centres of adulteration are discovered.

Taking the list in alphabetical order, the first adulteration come to is BAKING POWDER, of which 4 samples were submitted; 2 I have classed as genuine and 2 adulterated; these latter because they contained alum in considerable amount—viz., 37 and 23 per cent. respectively. There appears to be a difference of opinion amongst medical experts as to the effect of alum in baking powder, and some cases taken into court have been dismissed. Personally, I cannot see the consistency of allowing alum to get into bread through the medium of baking powder, and condemning it if added in another way. I have not found any alum in bread this quarter; so probably this baking powder is only used in private bakings.

BUTTER.—Out of 74 samples 16 have proved to be margarine, or rather more than 1 to 5 against 1 to 9 last quarter. The margarines contained from a trace of real butter up to 30 per cent. Until it is made an offence to colour margarine like butter, this fraud will continue, and I am quite convinced the cases detected of its substitution for butter do not anything like represent the true state of things.

CHEESE.—Three samples have been analysed. In neither sample was fat not due to milk detected, but one sample which I have returned adulterated (whether rightly I am not quite convinced on further reflection) was made from *skimmed* milk. It contained barely 15 per cent. of fat against 30 to 40 per cent. contained in ordinary cheese. The question is, does not the name *cheese*, unqualified, apply to the product of skim milk as well as that of whole milk or milk and cream? I am now inclined to think it does, and that the percentage of fat is simply a factor of quality. Of course if this article had been supplied as, say, Cheshire cheese, which is known to be a whole milk cheese, and at its price, a fraud would have been committed, but I understand the price in this case was very low.

It may be interesting to give the analysis of this cheese against that of another sample submitted at the same time.

Water	42.58	29.50 per cent.
Fat	14.65	37.60 "
Casein, &c. (Curd) ..	42.77	32.90 "
	100.00	100.00

COCOA.—One sample submitted which I have classed as adulterated, although it is the article erroneously known to the public as "Soluble" Cocoa, because being associated with a large amount of starchy matter, it makes a thick mucilaginous beverage which does not show the cocoa fat because of its inability to collect and separate. There

is no true solubility in this feature, and only a little cocoa in the preparation, as the following analysis shows:—

Cocoa	25 per cent.
Sago Flour	42 „
Sugar	33 „

COFFEE.—Out of 25 samples, 4 were mixed with chicory from 50 to 74 per cent.

MALT VINEGAR.—I mentioned in my last report that Mr. Knight must be credited with unearthing the fraud in this article, and experience proves how desirable was attention to it, for nearly half the samples submitted this quarter have proved wrong, most of them being simply coloured diluted pyroligneous acid, not entitled to the name vinegar at all.

MILK.—The attention given to this most important article of food is now having its reward, for out of 115 samples, only 5 have been reported against, three for watering (truly two very bad cases, 32 and 42 per cent.), and two for creaming.

PEPPER.—One sample was found adulterated with 25 per cent. of ground rice.

This completes the list of adulterated articles, but I may further remark that 6 samples of drugs have had attention and proved genuine. It may also be interesting to record the analysis of the condensed milks, of which 13 have been made—11 of the samples were from whole milk, and 2 from skimmed, but these latter were duly declared to be condensed skim milk on the tin. This article is milk reduced in bulk to about a third by evaporation and then cane sugar added. This latter, I believe, from a medical point of view, being its worst feature. I understand there is a make without cane sugar, but I've not been fortunate enough to have it submitted to me. I append an analysis of each of the different brands. Some of the samples were simply repeats of the same brand (I did not know this until after the analyses were made, when I wrote for particulars). The following are my analyses:—

Cane Sugar	38-98	35-37	35-66	36-86	39-96	38-59
Fat	9-41	12-49	13-07	12-56	11-14	1-50
Milk Solid } Lactose	8-49	14-61	14-00	14-05	13-22	13-52
not Fat } Proteids, &c. 9-77	9-72	11-84	9-93	10-07	13-51	
	Ash	1-89	1-97	2-06	1-85	1-93
Water	31-46	25-94	23-37	24-75	23-68	30-89

100-00 100-00 100-00 100-00 100-00 100-00

Taking an average, the concentration or condensation is nearly to a third of the original milk, so that a 1lb. tin equals about 2½ pints of ordinary milk. The cane sugar is not taken into consideration.

(Signed) E. W. T. JONES, F.I.C., County Analyst.

Wolverhampton, 31st March, 1893.

FOOD AND DRUGS ACTS INSPECTORS' QUERIES.

QUERY.

An Inspector purchases a sample of milk for analysis, and deals with it in the usual way. In about 3 weeks he receives a certificate of adulteration from the Public Analyst, but the bottle containing the retained sample has burst, or shot the cork and seal about 4 days previous, so that it is not forthcoming. Is this accident fatal to a prosecution? If yes, why? If no, why? J. S.

ANSWER.

Under Section 21 of the Sale of Food and Drugs Act, 1875, it is provided that "At the hearing of the information in such proceeding, the production of the certificate of the Analyst shall be sufficient evidence of the facts therein stated, unless the defendant shall require that the Analyst shall be called as a witness, and the parts of the articles retained by the person who purchased the article shall be produced."

Clearly, by this section, if the Inspector were unable to produce the part of the sample of milk which he retained, it would be fatal to the prosecution.

FOOD AND DRUGS ACT INSPECTORS' REPORTS.

Mr. E. W. H. Knight has made the following report to the Staffordshire County Council:—

I have the honour to report for your information that during the quarter ending March 31st, 1893, 142 samples have been submitted by me to the public analyst for analysis under the Food and Drugs and Margarine Acts. All the samples have been duly certified, 129 as genuine, and 13 as adulterated. The samples submitted are—

68 samples of milk	65 genuine, 3 adulterated.
14 „ malt vinegar	8 „ 6 „
24 „ butter	21 „ 3 „
3 „ cheese	2 „ 1 „
13 „ condensed milk }	All genuine.
15 „ lard	
5 „ coffee	

Proceedings have been taken against four persons in reference to the adulteration of malt vinegar, and convictions obtained, two being fined £10 each, and two £1 each. A fine of £7 was imposed at Leek for milk adulteration, the sample being reported to contain 32 per cent. of added water. The sample of cheese returned as adulterated is said to be "skim cheese." Seven informations have been laid during the quarter against persons for offences under the Acts. Two have been disposed of, and five are still pending. The fines imposed amount to £29. The quarter compares with the one ending December 31st, as follows:—

Quarter ending December 31st—			
3 samples of milk	adulterated out of 88 submitted.		
7 „ malt vinegar	14	„	„
1 „ Spanish juice	1	4	„
1 „ spirit of nitre	1	„	„

Quarter now ended—			
3 samples of milk	adulterated out of 68 submitted.		
6 „ malt vinegar	14	„	„
3 „ butter	24	„	„
1 „ cheese	3	„	„

(Signed) E. W. H. KNIGHT,

Inspector under the Food and Drugs Act for District "A" or North Staffordshire.

Mr. John Edward Morris has made the following report to the Staffordshire County Council, April 3rd, 1893.

In carrying out the provisions of the Food and Drugs and the Margarine Acts during the quarter ending March 31st, we have purchased or obtained the following samples upon 27 different occasions at 34 different places:—

47 milks	with 2 adulterations.
50 butters	13 „
20 coffees	4 „
6 malt vinegars	2 „
6 drugs	no „
1 cocoa	1 „
1 tea	no „
6 oatmeal	no „
8 pepper	1 „
5 bread	no „
1 spirits	no „
7 lards	no „
4 baking powders	2 „

Total 162

Total 25

Among the adulterated butters, 6 have been detected unlabelled while inspecting under the Weights and Measures Act. Seventeen prosecutions have been instituted, all successfully, while 8 stand over for hearing this quarter. The fines imposed amounted to £39 4s. In pursuance of your wishes, we have bought bread, butter, and milk at restaurants, and all have been pronounced genuine. Samples have been obtained at the various unions, and at the evening markets. The most important prosecution during the quarter has been instituted against a Birmingham grocer, for selling coffee and chicory in a tin with a label falsely describing the contents, and a fine of £5 was imposed.

The authorities of the county borough of West Bromwich having appointed their own analyst, separate purchases have been made for and in that place. There have been as follows:—

8 milks	with 4 adulterations.
5 butters	no „
3 coffees	no „
7 drugs	no „
4 lards	no „
3 peppers	no „
1 condensed milk	no „

Total 31

Total 4

Two prosecutions with fines of 50s., and one stands over.

(Signed) JOHN EDWARD MORRIS,
Inspector under the Food and Drugs Act for South Staffordshire.

The inspectors of Surrey under the Sale of Food and Drugs Acts state that for the quarter ending March 14, out of 134 samples purchased, 107 were certified by the analyst to be genuine.

THE SANITARY REGISTRATION BILL.

Mr. Andrew Stirling, the president of the Sanitary Assurance Association, occupied the chair on the 7th inst., at a public conference, held at the St. Martin's Town-hall, Charing-cross-road, to consider the Sanitary Registration Bill. There was a very small attendance. In opening the proceedings, the chairman remarked that although a great advance had been made there were still a vast number of houses, especially old houses, which were in a very bad and dangerous state. The registration of buildings should, he urged, be enforced by legislative action, so that improved means for the drainage of houses might be secured. Mr. Mark H. Judge proposed, "That in the opinion of this conference it is desirable that a law should be passed providing for the sanitary registration of buildings by the public health authorities." Mr. Hugh Leonard seconded the motion, and in supporting it Sir Joseph Fayrer remarked that if ever the public conscience was awakened it ought to be awakened at the present time upon the question of the Sanitary Registration Bill, particularly in view of a possible visitation of cholera. The resolution was put and carried. The Rev. H. R. Wakefield, chairman of the Sandgate Local Board of Health, proposed a resolution authorising the chairman to sign a petition praying Parliament to pass the Sanitary Registration Bill, with such modifications as consideration in committee might show to be desirable. Mr. Timothy Holmes seconded the motion, which was supported by Mr. R. Biddulph Martin, M.P., who said he could not hold out much hope that the second reading of the Bill would be reached during the present Session. After a discussion, the resolution was agreed to.

REPORTS AND ANALYSES.

BOAKE, ROBERTS & CO.'S SULPHUR DIOXIDE (SO₂).
We can strongly recommend this invention of Messrs. Boake, Roberts and Co. to the attention of Medical Officers of Health and Sanitary Inspectors. Our examination of the preparation bears out the report of Dr. A. Wynter Blyth, Medical Officer of Health, Marylebone, who says:—

"Hitherto when sulphur has been employed for disinfecting purposes, it produced a gas known as sulphurous acid gas, or scientifically, as sulphur dioxide. The gas has been recently liquefied by cold and pressure in bulk, and can be bought in convenient hermetically sealed tins, each tin being equal to about 2 lbs. of sulphur. The tin is so arranged that the disinfectant has merely to cut off a projecting lead tube, and the gas hisses out. This is likely to be a far more effectual and convenient a way of sulphuring a room than by the old process, and is now being given a prolonged trial in the Parish of St. Marylebone."

The makers say:—"We desire to bring before the notice of Medical Officers of Health and Sanitary Inspectors the merits of our invention for the application of Sulphur Dioxide, commonly known as Anhydrous Sulphurous Acid Gas, as a disinfectant in domestic houses, and for other sanitary purposes."

"Sulphur Dioxide or Sulphurous Acid Gas formed by the burning of sulphur in air has been used as a disinfectant from time immemorial. Its value is so well known and appreciated by all Sanitary authorities, that it is unnecessary to speak as to its intrinsic merits. It is in the practical application of this gas that our invention introduces a much-needed improvement and reform. The burning of sulphur in rooms, &c., is always attended with risk of fire, inconvenience, and waste of time and material. By this crude method also a larger portion of the sulphur is volatilized unburnt, whilst about 10 per cent. of it is converted into sulphuric acid, the fumes of which corrode all metal work and damage fabrics and furniture. When it is borne in mind that neither volatilized sulphur nor sulphuric fumes have the disinfecting properties of Sulphur Dioxide (sulphurous acid gas) it will be seen that a great portion of the sulphur so burnt is non-effective as a disinfectant, besides being otherwise harmful. Our invention completely overcomes these difficulties, and renders the treatment of infected rooms, disinfecting chambers, &c., extremely easy, rapid and effective. Our invention is based upon the fact that pure Sulphurous Acid Gas condenses into a liquid when subjected either to great cold or to a pressure of about 45 pounds on the square inch; and, further, upon the fact that when in this condition it has no corrosive action on iron, tin, solder, &c., metals which it would rapidly destroy in the presence of water, or even of moist air."

"Taking advantage of these properties, we first purify the gas from sulphur and sulphuric vapours, and then condense it into a liquid, storing it in carefully made tin cylinders, a form of package which possesses the requisite strength to resist the pressure exercised by Sulphur Dioxide, whilst being light and cheap. These little vessels are fitted with the simple contrivance of a soft lead tube, which only needs to be cut across with a sharp knife to set free the gas. Thus expensive vessels and valves are saved, and all trouble and expense in returning packages to the factory is avoided."

"We may mention that this system of applying pure Sulphurous Acid has met with the warm approval of Dr. James Edmonds, M.D., M.R.C.P., Medical Officer of Health and Public Analyst for St. James', and he strongly recommends it to the notice of all others interested in sanitary science."

"These tin cylinders can be made of any size required, but we find those carrying about 20 ounces of Sulphur Dioxide very convenient. The liquid gas is equal in effect to about double its weight of sulphur as ordinarily burnt for disinfection. Each 20 ounce tin may be relied upon to effectively disinfect a room about 12 feet cube, i.e., 1,728 cubic feet."

Medical Officers and Sanitary Inspectors desiring particulars as to price, etc., may obtain the same from A. Boake, Roberts and Co., Stratford, London.

IMPORTANT FOOD PROSECUTION AT BOW-STREET.

A WARNING TO COVENT-GARDEN SALESMEN.

On June 12th, Mr. T. F. Strutt, Sanitary Inspector Strand Board of Works, summoned Henry Levy, Floral Hall, Covent Garden, for unlawfully selling 6 packages containing 72 boxes of tomatoes to Samuel Scott, 15, Orchard Cottages, Mortlake-road, Richmond, the said tomatoes being at the time of sale unsound, unwholesome, and unfit for the food of man. The tomatoes in question were purchased from Henry Levy by Samuel Scott on May 26th, and were discovered by Scott to be rotten. Scott paid 5d. per box for them, which was a fair price for good tomatoes. He was not allowed to see the boxes before buying, but bought from a good, sound sample held up by Levy's assistant. On receiving the boxes Mr. Scott saw the cases were wet and the fruit rotten, and called Mr. Levy's attention to the fact, but Mr. Levy told him he could do what he liked with them. To a suggestion that he should "put them on a dunghill" Mr. Scott turned a deaf ear, and showed them to Mr. Strutt, the Strand Sanitary Inspector. Mr. Strutt submitted the tomatoes to Dr. F. J. Allan, Medical Officer of Health, who pronounced them quite unfit for food. The goods were then seized and brought before Mr. Lushington, the magistrate at Bow-street, who ordered their destruction. As Mr. Levy had been paid for the tomatoes, their destruction naturally had no effect upon him; but the practice of palming off upon green-grocers, costers, &c., rotten food was one dangerous to public health, and the Strand Board of Works resolved to summon Mr. Levy under the Public Health London Act, 1891, Section 47, Sub-Section 3. It

is gratifying to find that Mr. Lushington, the magistrate, inflicted a penalty of £20 and costs, which, it is hoped, will teach Covent-garden salesmen a lesson. It would have been a manifest injustice to have summoned Mr. Scott, in whose possession the tomatoes were; and this getting at the real offender is a procedure we would commend to Inspectors elsewhere in cases of this character, in which, usually, the destruction of the goods is the only step taken.

THE RAILWAY RATES MUDDLE.

In the *Investors' Review* for May, Mr. Wilson publishes an article upon "The Railway Rates Muddle." Mr. Wilson says:—

"In the room of these discarded and discredited devices and instruments, the Government should create a Railway Commission, with ample powers to investigate facts, and fix rates for goods, and to regulate passengers' fares in accordance with the bearing of these facts. It should have power to regulate every description of railway business."

"Strong men would be required for this commission, and for a time, at any rate, it might demand a heavy clerical staff, but with independent men the commission, if it cost £50,000 per annum, would be a cheap investment for the country, and, in the end, for the railway shareholders as well. It would be the business of such a body to systematise by degrees all railway charges, to insist on the economical and scientific conduct of all traffic, to protect the native against the bounties given to the foreigner, and generally to evolve order and fair-dealing out of what, oftener than not, is now chaos and extortion. It would have, in the low rates which are now accorded to traffic having its origin abroad or governed by coasting-ship freights, a leverage upon the companies."

"It should be an independent body responsible to Parliament, i.e., the nation alone, consisting of a chairman—not a lawyer, and two, three, or more ordinary members, one of whom might be a lawyer, trained in the art of examining witnesses. But under no circumstances should the chairman be a lawyer, were it for no other reason than that wherever lawyers are, justice is made costly. They cannot dissociate their minds, these men, from ideas of 'fees,' and 'council,' and expensive formal pleadings in court, whereas the new railway commission should be cheap and informal in all its dealings with the railways and the people. Mr. Mundella ought, in short, to borrow from the Americans the principles on which this new body is constituted."

AGRICULTURAL IMPORTS.

Account shewing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended June 10th, 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities.	
	1892.	1893.
Animals living:—		
Oxen, bulls, cows, and calves	Number	18,682
Sheep and lambs	"	888
Swine	"	1,243
Fresh meat:—		
Beef	Cwts.	54,087
Mutton	"	42,178
Pork	"	437
Salted or preserved meat:—		
Bacon	"	74,226
Beef	"	6,813
Hams	"	26,415
Pork	"	3,649
Meat unenumerated, salted and fresh	"	1,694
Meat preserved, otherwise than by salting	"	20,963
Dairy produce and substitutes:—		
Butter	"	31,019
Margarine	"	13,194
Cheese	"	31,362
Condensed milk	"	8,040
Eggs	Gt. Hunder.	216,784
Poultry and Game	Value £	2,901
Rabbits, dead (not tinned)	Cwts.	182
Lard	"	28,127
Corn, Grain, Meal and Flour:—		
Wheat	"	1,559,034
Wheat Meal and Flour	"	297,235
Barley	"	106,470
Oats	"	408,117
Pease	"	29,124
Beans	"	187,622
Maize or Indian Corn	"	319,440
Fruit, Raw:—		
Apples	Bush.	10,520
Oranges	"	82,940
Lemons	"	20,791
Cherries	"	2,998
Plums	"	546
Pears	"	12,216
Grapes	"	463
Unenumerated	"	41,306
Hops	Cwts.	83,741
Vegetables:—		
Onions, raw	Bush.	20,523
Potatoes	Cwts.	283,536
Unenumerated	Value £	35,718

* Not separated in 1892

Statistical Office, Custom House, London, June 12th, 1893. T. J. PITTAR.

To the EDITORS of FOOD AND SANITATION.

SIR,—In your issue of May 13th, attention was called to a case, "West Bromwich Milk Appeal," wherein it was stated that the milk in question was purchased from the Lilleshall Dairy Company, in Shropshire, I beg to state that there is no such company, the Dairy here being a private one, belonging to His Grace The Duke of Sutherland, for whose use it is wholly and solely kept. We do not sell milk to any dealer in such article.

Trusting you will correct the statement.—I am, Sir, your obedient servant,

Lilleshall Dairy, Newport, Salop,
May 16th, 1893.

MARY PRICE,
Manageress.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT-COFFEE COMPANY.

(Proprietors, KRIKORIAN BROS.)

MONUMENT BUILDINGS, LONDON, E.C.

SMOKERS SHOULD USE CALVERT'S DENTO-PHENOLENE.

1s. 6d., 2s. 6d., and 1lb. 7s. 6d. Bottles.

A Fragrant LIQUID Dentifrice.
A DELICIOUS MOUTH WASH.

Editor of *Health* says:—"An elegant and agreeable Toothwash, most effectual for strengthening the gums in case of tenderness, and ridding the mouth of the aroma of tobacco."

Can be obtained at Chemists, or will be sent post free for value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

Food and Sanitation.

SATURDAY, JUNE 24, 1893.

NOTICE.

All communications for the Editors to be addressed to the Editors, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

QUACKERY AND PUFFERY.

ALABONE V. MORTON.

Mr. Cure-for-Consumption Alabone has sued a former employé for using his book and testimonials. The following *bonnes-bouches* are portions of the evidence given on Friday and Saturday last week, before Mr. Justice Wright:—

The defendant, Henry E. M. Morton was called, and stated that he was with the plaintiff for about 15 years, and that after Dr. Alabone's name was removed from the "Medical Register" in 1886 he approached witness and said that he was afraid of being prosecuted, and would witness be willing for him to carry on the business in his (witness's) name. It was then decided that, if any proceedings were commenced, witness was the person who was to be prosecuted. Mr. Justice Wright: Do you know that you are disclosing a criminal conspiracy? Witness: I am quite aware of it, my Lord, but it is the truth. In reply to Mr. Mulligan, witness said that after that time he became what was practically the general manager of the business. The letters were handed to him in the morning after Dr. Alabone had taken the money out, and witness always answered them and treated the cases severally entirely himself. The plaintiff never dictated these letters. Witness also saw the patients in the plaintiff's absence, and himself arranged the fees according to the amount that he thought the individual would pay up to. The charges made varied from one to five guineas a month. The medicines were compounded by witness. Many of the receipts given were his own. The prescription of the lacnanthe remedy was given to Dr. Alabone by a Mr. Trick. He knew that, for Mr. Trick had told him so himself. Lacnanthe was a plant which grew, he believed, in Virginia. It was worthless as a medicine—in fact, the whole compound was, in his opinion, a "bogus." It was all nonsense to say that there was no strychnine used. There was enough used in the medicines they made to kill 2,000 people a year, to say nothing of morphia and chloroform.

To Dr. Alabone himself Mr. Justice Wright put the following posers:—Addressing the plaintiff, Mr. Justice Wright told him that he need not answer the questions he wished to ask him unless he liked. His Lordship then said there were a large number of what were usually termed "Press notices" in Dr. Alabone's book, which purported to be reprinted notices from the *St. Stephen's Review*, the *Christian World*, the *Guardian*, the *Echo*, the *Observer*, the *John Bull*, the *Advertiser*, the *Whitehall* and *Court Journals*. Addressing witness, he asked him to turn to page 249 of his book, on which there was an extract from the *Guardian*, and he asked Dr. Alabone, Is that your composition?—No; not that I am aware of. What do you mean by that answer; did you write it or did you not?—I did not. Witness was understood to say that he might have read through

and corrected the proof. Were any of these "opinions" paid for as advertisements?—No; but advertisements were to be given the paper on condition that a notice appeared. I also had the proofs to read. Do you mean to say that a paper like the *Guardian* makes that kind of bargain?—I cannot say; the *Echo* certainly did. Do you mean to say that that arrangement was made by the *Guardian*, the *Observer*, the *Echo*, and so forth—that these papers agreed to insert praises of your book if you would give them an advertisement?—I do not know about praises, but certainly for notices of the book. Was any payment made to the *St. Stephen's Review*?—No; the only payment, if you can so call it, was the taking of a certain number of copies.

Mr. Justice Wright then questioned the witness as to whether any payment had been made to any of the other papers, mentioning each one to the witness separately, and witness replied in each case that no payment had been made.

In answer to further examination, witness replied that he had never made any payment for any of the testimonials that appeared in his book.

Questioned about the drug lacnanthe, he said it was a spirit, and that the herb grew chiefly in New Jersey.

In reply to the question by Mr. Justice Wright, he mentioned the name and address of the wholesale firms from which he bought the drug, and also wrote down the name and address of the person from whom he had procured the root itself. He also wrote down for the Judge's private information the component drugs of the lacnanthe recipe used by him in his special treatment of consumption.

On Dr. Alabone's leaving the witness-box.

Mr. Justice Wright, addressing the Court, said:—This is an action brought by the plaintiff to restrain the defendant from pirating certain medical testimonials and from dishonestly making use of professional information obtained by the defendant whilst acting as a confidential clerk of the plaintiff, and from representing that certain so-called opinions of the Press relating to the plaintiff related to the defendant. The plaintiff was at one time qualified to practise as a surgeon, but his name was struck off the register. He, nevertheless, continues to practise as a surgeon, and also prescribes, prepares, and sells drugs for non-surgical purposes, thereby subjecting himself to penalties under the Apothecaries' Act. The defendant is a person who never had any qualification, but having learnt the business from the plaintiff of selling this medicine, or whatever it is, now follows the business as a rival on his own account, with the addition that he represents some of the plaintiff's pretences to be his own property. He owned engaging with the plaintiff in what he admitted he knew to be a criminal conspiracy to defeat the provisions of the Medical Acts, and he admitted—whatever his admissions may be worth—having been a party to the wholesale illegal supply of strychnine and other poisonous drugs. The plaintiff's book is designed to puff an alleged specific for consumption which it is not uncharitable to suppose is inert, if not injurious. It is recommended by so-called "opinions of the Press" and by statements of cases of alleged cure, and by alleged testimonials from patients. The alleged "opinions of the Press" have every appearance of being not independent or real notices, but paid or arranged notices or advertisements. The alleged cases do not appear to correspond with the case-books from which they are said to have been taken. The alleged testimonials are, no doubt, in some cases written by patients in good faith, but many of them have a highly suspicious character and are suggestive of concoction or purchase. One of the strongest is from a certain Isaac Hurn, who was called as a witness by the plaintiff to corroborate the plaintiff's evidence, and he wrote the letter I read this morning, which is published by the plaintiff, and wrote the other letter subsequently to the defendant, which he was rather anxious should not be alluded to, but which is to my mind of importance and must be considered. This one circumstance of Hurn's letters seems to me to go far to indicate that the suspicions roused by the perusal of the plaintiff's book are well founded, and, when taken with the other admitted facts in relation to the plaintiff's business, obliges me to think that that business may possibly be what would be a cruel and nefarious system of obtaining money by false pretences from persons who are induced to believe themselves consumptive. If this is so, the law will not lend its aid to protect a book published as part of such a scheme. No doubt the case is not at present carried beyond grave suspicion; but, where ground of such suspicion exists, I think the Court ought not to act blindfold. It was not for the interest of either party to assist justice in reference to these considerations, and I am unable to rely upon or accept the evidence of either party, except to a very limited extent. The course which I shall take will be this—I shall request the Official Solicitor, with the assistance, if necessary, of the Director of Public Prosecutions and of some one or more of the medical societies, to institute inquiries into these cases and to find out from the newspapers, whose opinions purport to be set forth, whether these were opinions of the newspapers or whether they were in any way and to what extent arranged. Either party may, if so advised by counsel, put the case into the paper for judgment on July 3. In the meantime the books and papers will remain in my custody.

We shall be curious to see what the journals in question have to say to this. But the ease with which quack medicines obtain press notices, shameful though it be to the press concerned, is even more so to the Legislature that, for the sake of some £200,000 per year, allows the public to be fleeced by bogus preparations of the most rubbishy character. The Member of Parliament who would introduce a Bill making the Beecham's, Clarke's, Holloway's and like vendors pay a guinea stamp per box or bottle, would earn the public gratitude.

ADULTERATION PROSECUTIONS.

MILK.

At York City Police-court on the 12th inst., Henry Smith, milk dealer, Hull-road, was summoned for selling adulterated milk on the 14th May. The prosecution was instituted by the Sanitary Committee of the York Corporation, for whom Mr. G. McGuire, Town Clerk, appeared. Mr. J. Atkinson, the Corporation Sanitary Inspector, proved purchasing a pint of new milk, and produced a certificate from the Public Analyst, Mr. Baynes, showing that the sample was adulterated with 20 per cent. of added water. Defendant pleaded that he bought the milk of some one else, but did not know his name. Fined 20s. and costs.

At Farnham Petty Sessions, Edward Coxe, dairyman, Downing-street, was summoned for selling adulterated milk on May 11th. Mr. C. J. Martin, Inspector under the Food and Drugs Act, deposed to purchasing a pint of "new milk," which on analysis was found to contain 17 per cent. added water. Defendant, who pleaded guilty, said he thought the public were as good judges as was the Inspector. Fined £2 and 12s. 6d. costs.

At Wolverhampton Police-court on the 14th inst., Selwyn Hawkins, milkseller, of Workhouse-lane, Tipton, was fined £5 and the costs, for selling milk from which a quantity of cream had been separated. The case was proved by Mr. Morris, the Inspector of Food and Drugs.

SENSIBLE MAGISTRATES AT MANCHESTER.

THE WARRANTY AGAIN.

At Manchester Police-court, on the 7th inst., before Messrs. Aronsberg and Aston, Francis Robinson, Mount Farm, Gorton, was summoned for selling milk which was not of the nature and substance demanded. Mr. A. T. Rook, Superintendent of the Nuisance Department, prosecuted on behalf of the Corporation. Inspector Holland proved purchasing two pints of milk from defendant's son in Rumford-street, Chorlton-on-Medlock, on the morning of the 28th April, one of which was subsequently found to be genuine. On the morning of the 1st May, Inspector Holland went, at the request of the defendant, to the Longsight Railway Station, and took samples from two cans of milk consigned to the defendant by Charles Robinson, Shawlough Farm, Herdsfield, near Macclesfield. On analysis Mr. Estcourt found that the sample obtained on the 28th April, as compared with the two taken on the 1st May, contained 10 per cent. of added water, and had been deprived of 26 per cent. of its fat. Mr. Cobbett, solicitor, appeared for the defendant, and said that whether this milk had or had not been adulterated by his client, the fact that it was found in his possession rendered him liable unless he could prove that the milk was consigned to him with a written warranty as to its genuineness, and that it was sold just as he received it. If he could do this, he was entitled to an acquittal under the 25th Section of the Act. Mr. Cobbett then called Francis Ernest Robinson, defendant's son, who swore that on the morning of the 28th April he went at a quarter past eight to Longsight Station, and there saw three cans of milk consigned to his father. One came from Poynton, and the other two from Mr. Charles Robinson, farmer, Herdsfield. He poured the milk from one of Robinson's cans into one of the "drums" in his cart, and the milk from the can from Poynton into another "drum." With every can they received from Robinson they got a warranty, and with the can he emptied on the 28th of April he got the warranty produced. He went on his round after getting the milk at the station, and in Rumford-street, Chorlton-on-Medlock, Inspector Holland took samples from each can. When he got home he told his father what had happened, and gave him the "warranty" ticket. No one had done anything to the milk he got at the station; it was sold just as it was received; the "drums" were perfectly empty before the milk was put into them at the station. John Sutton, milk dealer, Norman-grove, Longsight, said that on the 28th of April he was at Longsight Station, and assisted the last witness to pour the milk from the can sent by Robinson into one of the "drums" in last witness's cart. Nothing was done to the milk; the "drum" into which it was poured was perfectly empty and clean. Francis Robinson, the defendant, gave evidence as to having a warranty for every can of milk he received from the farmer Robinson. The ticket produced was the warranty which came with the can of milk he received on the 28th of April. Charles Robinson, Shawlough Farm, Herdsfield, near Macclesfield, said he supplied defendant with milk, and with each can sent a warranty. The one produced would be the one sent with the can on the 28th of April. (The "warranty" said that the milk was pure, new, and unskimmed.) The milk he consigned to defendant was as it came from the cow. Mr. Cobbett said that that was his case, and submitted that under the 25th Section the summons against his client should be dismissed. The magistrates consulted with their Clerk (Mr. Le Court), and then Mr. Aronsberg said defendant was liable to a penalty of £20. He must pay a fine of £5 and costs. He had his remedy against the farmer.

At Warrington Borough Police-court, on the 5th inst., Thomas Daley, St. Austin's-lane, was summoned for selling milk as such from which the cream had been abstracted. The Town Clerk (Mr. J. Lyon Whittle) prosecuted. Inspector Norman deposed to sending a youth to the defendant's shop for a quart of milk for which he paid 3d.—the ordinary price. He submitted a portion of it to the Public Analyst, who certified that 10 per cent. of cream or fat had been abstracted from it—in other words, that it was "skim" milk. The defendant said that neither he nor anyone in the house tampered with the milk. If it was not good it must have been the fault of the farmer who supplied him with it. The Bench said that the defendant

was responsible for the milk being sold. The public must be protected. He would be fined 30s. and costs. The defendant: Have milk dealers any protection against the farmers? The Clerk: You can obtain a written warranty from a farmer that the milk is good. John Richard Lilley, 5, Pitt-street, was summoned for a similar offence. Inspector Norman having given evidence, the defendant said that he served the youth Flaherty, whom the inspector had sent for the milk, from the "skim" milk can by mistake. He very rarely served in the shop. The Bench, however, imposed a fine of 30s. and costs.

AN EXEMPLARY FINE UPON MR. BROWN AT LAST.

At Southwark, on the 21st, William Brown, dairyman, Swan-place, Old Kent-road, was fined £20 and 12s. 6d. costs for selling milk, which, according to the Public Analyst, was deficient in butter fat to the extent of 25 per cent., and contained 15 per cent. of added water. A previous conviction was proved.

ANOTHER RIDICULOUS FINE!

At Devizes Borough Petty Sessions, George Hawkins, dairyman, Caen-hill, was charged with selling a pint of milk adulterated with water to the extent of 25 per cent.—Mr. Selby, Inspector under the Food and Drugs Act, prosecuted, and Mr. Hopkins appeared for the defendant.—William Morgan, assistant to Mr. Selby, said that on the morning of the 21st May, he bought a pint of milk from the defendant and divided it into three parts. One part was given to the defendant, one kept, and the other sent for analysis. When he told the defendant that the sample would be sent for analysis he asked him to take some milk out of the other can, which was being sent to the dairy.—Mr. Selby said he sent the milk for analysis to Mr. Gatehouse, Analyst, and had received the certificate submitted, showing that the milk consisted of one-fourth added water. For defendant, Mr. Hopkins said that on the morning of the 21st, Mr. Hawkins, who had been unwell, overslept himself, and getting down late his wife had already put the milk in the can. It was the custom to leave a quantity of cold water in the vessel during the night in order to keep it cool, and Mrs. Hawkins in the hurry did not think of this, and emptied the milk in without first pouring out the water. There was no other milk, and although defendant knew that the water was in it he could not help himself, but was obliged to deliver the milk as it was, rather than disappoint his customers. He next day allowed them an extra quantity on account of the water. Although he had been in the milk trade for some time, he had never had any complaints made against him. Mr. Hopkins called both defendant and his wife, whose evidence bore out the statement made by him. The Deputy Clerk (Mr. Dring) asked defendant if he had told his customers at the time, that there was water in the milk. He at first said he did, but on being asked if he could bring one of them as witness he said he could not be sure. But he gave them extra milk next day. The other milk, which was for the dairy, was not suitable for sale to ordinary customers as it speedily became so sour.—The Bench considered the case proved, and the Chairman said that defendant would be fined 4s. 6d. and the costs—15s. in all.

MR. HANNAY'S ASSISTANCE TO MILK ADULTERATORS.

At Marylebone Police Court on Thursday, 15th inst., Mr. A. Falconer, farmer and local preacher of Buckwell Lodge, North Kilworth, near Rugby, was summoned by Inspector T. F. Strutt, Strand district, for sending milk to London adulterated with 8 per cent. of water. The milk was consigned to a dairyman in the Strand, and the sample was taken at the place of delivery (viz., Euston Station) under the sale of Food and Drugs Amendment Act Sect. 3. The defendant in defence stated that the refrigerator had been leaking (an excuse we are tired of hearing). Mr. Hannay, who seems to discourage food prosecutions, said it did not appear to be defendant's fault, and was a case for a nominal penalty, and fined defendant 10s. When will Mr. Hannay assist local authorities in their endeavours to carry out the Act, and thus prevent adulteration.

On several occasions Mr. Hannay has told Inspectors to go to the fountain head of adulteration, meaning the farmer, and yet when one is brought before him he is even more lenient than with those who, in many cases, suffer for the sins of the farmer. In this case it must have cost the Strand Board of Works many times the amount to prosecute the farmer, and these ridiculous penalties encourage adulteration and compel Vestries to ignore the Acts.

At Marlborough-street Police-court, on the 16th inst., D. Davis, a dairyman, of 42, New Compton-street, St. Giles', was summoned by T. F. Strutt for selling milk adulterated with 8 per cent. of water. The defendant was represented by Counsel, who stated that no cows were kept, and that defendant sold the milk in the same state as it was received from the farmer. Mr. Newton said if the defendant did not keep real cows, he must be discouraged in the use of the iron one; and as he understood it was the third time defendant had been summoned, he would be fined 60s. and costs, and if he was brought before him again, would be fined the full penalty.

BEER.

John Mahoney, proprietor of the Sun beerhouse, Union-street, Borough, was summoned at Southwark on the 21st for selling beer diluted to the extent of 8½ per cent., and was fined £10 and costs.

OLIVE OIL.

At Marlborough-street Police-court, on the 16th inst., H. Appenrodt, a provision dealer, of 8a, New Coventry-street, was summoned by T. F. Strutt, for selling olive oil adulterated with 50 per cent. of oil other than that of the olive. Fined 40s. and costs.

VINEGAR.

At the Borough Police Court, Grimsby, on the 19th inst., George Tear, grocer, Wellowgate, carrying on business as George Tear and Son, was charged with having sold adulterated vinegar on the 17th. Defendant, in answer to the charge, said he bought the vinegar as malt vinegar, and sold it as such.—The prosecution was undertaken at the instance of the Urban Sanitary Authority, on whose behalf Mr. T. Mountain appeared. Mr. C. S. Barton watched the case in the interests of the manufacturers and wholesale dealers whose names did not transpire. The prosecution was under the Food and Drugs Act.

Mr. H. F. Moody, Junior Sanitary Inspector for the borough, was called by Mr. Mountain. On the 17th May last he went to defendant's shop and asked for a pint of malt vinegar. He handed defendant a perfectly clean pint bottle, and after leaving the shop for a short time the defendant returned with the bottle filled with liquid. Mr. William Moody, the Senior Inspector, then came into the shop and informed the defendant that the vinegar was for the purpose of analysis. It was then divided into three parts, one being sent to the analyst, one being kept by witness, and one being left with defendant for his own protection. The name of Mr. Baynes, of Hull, was mentioned as the analyst. Defendant said it was the first time he had had a sample taken for the purpose. Defendant, whilst witness was in the shop, said that the vinegar was much darker in the sample than in the delivery. The samples were sealed, and on May 18th he took one of the bottles to Hull for analysis, and the following was Mr. Baynes' certificate:—I, the undersigned Public Analyst for the Borough of Grimsby, do hereby certify that I received on the 19th of May, 1893, from you a sample of malt vinegar, No. 62, for analysis, and have analysed the same and declare the result of my analysis to be as follows:—

"I am of opinion that the said sample contained the parts as under, or the percentage of foreign ingredients is as under:—It is acetic acid diluted and coloured, mixed with 20 per cent. of malt vinegar."

Defendant, in reply to the Court, said he had nothing to say except that he bought it as malt vinegar and sold it as such. He kept it in rather a warm place, and asked if it was thought this would make any difference to it. Mr. Mountain interposed that he was going to call expert evidence, and the defendant would then be able to put his question. Mr. James Baynes, of Scale-lane, Hull, Analyst for the County, Hull, Grimsby, and other places, spoke to having received the sample of vinegar in question from Mr. Moody on the 19th of May. He analysed the contents of the bottle, and he found it consisted of not more than 20 per cent. of real malt vinegar. Eighty per cent. of the liquid was acetic acid diluted and coloured. It was not malt vinegar. The Court: Should you say it was injurious?—I am not a medical man, and I would rather not say. The Defendant: Do you think it would make any difference to the vinegar if it were kept in a warm place?—No, I think not. The Chairman: Have you any opinion as to what the difference in value would be as compared with pure malt vinegar? I would rather not give an opinion.—But there is a difference? Yes, a material difference. After a conversation as to the qualities of acetic and pyroligneous acids, Alderman Veal expressed an opinion that the chief point for decision was the impurity or otherwise of the vinegar. Mr. Otto Hehner, Billiter-square, London, Analyst, &c., said that although he had not made an analysis of the liquid, he had seen Mr. Baynes' report, and he quite agreed with his deductions. Mr. Mountain: And you say the liquid is not malt vinegar? Alderman Veal: He cannot say that. Witness: No; I have not analysed it. Defendant: You have not analysed it? No. The Chairman asked Mr. Mountain if he could produce any evidence to show whether malt vinegar was asked for or not in this particular case. It was usual, he thought, just to ask for vinegar. Mr. Mountain replied that the defendant himself admitted that in his case malt vinegar was asked for, and he now said that he bought it as malt vinegar, and sold it as such. He admitted persons generally asked for vinegar. Defendant: They never ask for malt vinegar. Mr. Mountain: In this case malt vinegar was asked for, and the purchaser was entitled to have it. Alderman Veal understood that the defendant purchased the liquid as malt vinegar, and that the defendant thought it was malt vinegar. Defendant said that was so. The Chairman: Have you an invoice showing how you bought this vinegar?—Not with me, sir. I am prepared to swear that I never did anything to it, sir. The Chairman, after the magistrates had consulted in private, said the case was of considerable importance. No doubt the prosecution found it necessary to have ample and sufficient proof of their case, but unfortunately it had made the expenses very heavy. There was no alternative for the Court but to convict according to the evidence, and they found that in this case a large amount of adulteration had taken place. A fine of 10s. would be imposed, but the expenses were £14 10s., making a total of £15 for defendant to pay. Defendant asked for time, and a week was allowed for payment of the money.

COFFEE.

At Leicester on the 10th inst., Benjamin Freestone, Co-operative Stores Manager, Great Glenn, was summoned for selling adulterated coffee on the 15th May. A niece of Supt. Ormiston proved purchasing the coffee, and said she asked for best coffee. Supt. Ormiston produced the analyst's certificate, which showed that the sample was 66 parts coffee and 34 chicory. Defendant alleged that he told the purchaser that it was mixed, but this the young lady denied. Fined 20s., and 13s. 6d. costs.

At Dublin Police-court on the 16th, John Griffith, North King-street, and Andrew Brady, Phibsboro', were fined £4 each for selling coffee which was adulterated with 35 per cent. of chicory. Mr. MacSheehy, solicitor to the Corporation, prosecuted, and Sanitary Inspector J. Kane proved the cases.

BUTTER.

At the County Petty Sessions, Guildford, on June 3rd, Wm. A. Maslen, of Ash, was summoned under the Food and Drugs Act for selling ½-lb. of butter which was not of the nature and quality demanded by the purchaser.—Mr. C. J. Martin, Inspector under the Food and Drugs Act, proved visiting defendant's shop, on May 11th, and purchasing ½-lb. of butter, for which he paid 6d. He produced the Analyst's certificate, which showed that the sample consisted of 75 per cent. of foreign fat, 13 per cent. of water, curds and salt, and not exceeding 12 per cent. of butter fat. The sample was artificially coloured with a quantity of coal-tar pigment, and was a sample of margarine.—Defendant admitted selling the sample as butter, and produced a letter from the wholesale firm of whom he bought it stating that the article was pure butter.—A fine of £1, and 12s. costs, was imposed.

WHISKY.

At Warrington, on the 5th inst., Eliza Young, Shakespeare Inn Dolman's-lane, was summoned for selling, on the 5th May, a quantity of whisky not of the quality demanded by the purchaser. Mr. J. Lyon Whittle (Town Clerk) prosecuted, and said that the whisky in question was found to be adulterated to the extent of 10 per cent. above the amount of adulteration allowed by law. Mr. R. Norman, Sanitary Inspector, stated that he went to the Shakespeare Inn, and called for two pennyworth of whisky, and was supplied out of a jar that stood on the counter. He then asked for a pint of whiskey. At that moment a man came in and the defendant said to him "It's the Inspector, go down in the cellar, and fetch me some whisky." Witness, however, said he would again be supplied from the jar, and, after some demur, the defendant complied with his request. He paid 2s. for it—the ordinary price—and submitted one-third to the Public Analyst, who certified that the whisky contained 10 per cent. of water more than that allowed by law.—Samuel Clare, landlord of the King and Queen Inn, Padgate-lane, was then summoned for a similar offence. Inspector Norman deposed that on the 6th May he sent a youth, who was in the employ of the Corporation, to the house in question to purchase a pint of whisky. Witness afterwards saw the young woman who had served the youth, and told her it was his intention to submit part of the whiskey to the Public Analyst. He subsequently did so, and the Public Analyst certified that the whisky was adulterated to the extent of 8 per cent. over the limit.—Samuel Wilson, of the Feathers Hotel, Bridge-street, was also summoned for a similar offence. Evidence was given by Inspector Norman to the effect that a pint of whisky was purchased at the Feathers Hotel by Flaherty, and when submitted to the Public Analyst, a certificate was given stating that it contained 13 per cent. of adulteration more than was allowed by law. Each defendant was fined 30s. and costs.

BRANDY.

At the County Public Office, Leicester, on the 10th inst., Wm. Ward, South Croxton, was summoned for selling adulterated brandy on the 16th May. Mr. Fowler defended. P.C. Freer stated that on the 16th May he purchased a pint of brandy at defendant's house, and paid 3s. 8d. He handed it to Supt. Ormiston. Defendant kept the Malt Shovel at South Croxton.—Cross-examined: Defendant's wife fetched a fresh gallon jar out of the cellar, and he heard her draw the cork.—Supt. Ormiston said he divided the brandy into three parts, one of which he kept himself, the other he gave to the defendant's wife, while the third he sent to Dr. Emmerson. The certificate he received from the doctor showed that the brandy was adulterated to the extent of 26·70, or 1·70 below the standard.—Mr. Fowler said the brandy was sold to the defendant by the brewers, adulterated 25 per cent., which was the very lowest that was allowed. Defendant received the brandy in March, and, as they were perfectly aware, it constantly evaporated and lost its power the longer it was kept. It would not make any difference whether the vessel was corked or not. He should prove that when the officer called defendant's wife went into the cellar and fetched a jar exactly as it had come from the brewers. It had not been opened, and from the jar the officer was served with the brandy. It would be impossible for the publican to dilute the brandy to such a small extent. A few drops of water would be sufficient, and the publican could not possibly derive any benefit from it, and it would only amount to about ½d. per gallon. The brewers kept themselves just within the law by sending out brandy at the lowest possible standard. The house was "tied," and defendant was bound to take whatever brandy the brewers sent him. He asked the magistrates to order defendant to pay the costs, and not inflict a fine. Defendant's wife proved that the jar was a fresh one. Defendant stated that the brandy was sent to him by the brewers adulterated to 25 per cent. The Chairman said the magistrates sympathised with the defendant, and it appeared to them that he was not the guilty party. The brewers were greatly at fault, but defendant, as he had the brandy in his possession, was responsible. Fined 20s., including costs.—Henry Adams, licensed victualler, Hungarton, was summoned for a similar offence.—On his behalf Mr. Toller pleaded guilty, and Supt. Ormiston said the adulteration was the same as in the last case.—Mr. Toller said the defendant's house was also "tied" to the same brewery—the Beeby Brewery—and he pointed out that it would be impossible for the two men to have adulterated the brandy to exactly the same extent.—A similar fine was imposed in this case.

THE DUBLIN CORPORATION CONDEMNS DR. CAMERON'S BILL.

WHAT ARE CORK, LIMERICK, AND OTHER IRISH TOWNS DOING?

The Public Health Committee of the Dublin Corporation have taken action in the matter of the Bill to Amend the Sale of Food and Drugs Act, and they have reported to the Council as follows:—

"Your Committee beg to report that there is now a Bill before Parliament proposing to amend the Sale of Food and Drugs Act. Your Committee believe that this Bill, if passed, will greatly interfere with the efficient working of the Acts relating to adulteration; one of its Clauses provides that a mere invoice is to be regarded as a warranty that the goods referred to are pure. For example, if a wholesale dealer sold to a retailer a mixture of chicory and coffee, and invoiced the mixture, as is sometimes done, as coffee, then the retailer could not be proceeded against. The vendors of articles should be held responsible for their purity, and if they are fined for selling adulterated articles, it is open to them to proceed against the persons from whom they purchased the adulterated articles. It is not fair to require a person who purchases, say, a mixture of butter and margarine as butter, to be told by the dealer that the mixture was invoiced as butter, and that the purchaser must seek for redress against the manufacturer, who generally resides in Holland or America. Your Committee understand that many sanitary authorities in England have petitioned against this Bill, and your Committee suggests that a petition be presented to the House of Commons praying that the Bill may not be passed. All which your Committee submit as their report.

"DANIEL TALLON, Chairman."

THE CENTRAL AND ASSOCIATED CHAMBERS OF AGRICULTURE AND MARGARINE.

The Margarine Committee of the Central and Associated Chambers of Agriculture have issued a set of recommendations with a view to the strengthening of the law against the fraudulent sale of margarine or butter:—

1. The colouring of margarine to be prohibited.
2. The admixture of more than 6 per cent. of butter with margarine to be made illegal.
3. All imported butter, as well as margarine, to be subject to examination and analysis.
4. Government Inspectors to be sent to districts in which the local authorities do not enforce the law, with power to take samples and prosecute offenders.
5. Officers authorised to take samples to be empowered to appoint in writing, deputies to take samples on their behalf.
6. Hotels and restaurants to be subjected to the same liability of inspection as shops and other places in which butter or margarine is sold.
7. Margarine factories and wholesale stores, as well as retail shops, to be open to inspection.
8. All vendors of margarine to be registered, the register to be open to public inspection.
9. Margarine sold in bulk in a shop to be in full view of the customers, and not on the same counter as butter.
10. Invoicing margarine under any other name to be made illegal.
11. The original vendor to be prosecuted when a seller of margarine as butter is excused for having offended unwittingly, but the unwitting purchase of margarine from a foreign source not to be a valid defence.
12. The word "margarine" and no other word with it, to be branded on packages and parcels of margarine in black ink.

Most of these suggestions have been embodied in a Bill introduced by Mr. Horace Plunkett.

NORMANDY BUTTER ADULTERATION.

Mr. Vice-Consul Leeson, of Caen, states with regard to the adulteration of this butter, he can only report again, as he did last year, that, like the poor, it is always with us; there appears to be no diminution of the practice; it is carried on in defiance of the laws framed to repress it, and in the face of the authorities, who appear to be unable to cope with it. The practice is said to be principally confined to the middlemen and small dealers. The export of Normandy butter to the United Kingdom in the year 1889 was estimated at 77,000,000 fr., falling in 1890 to 70,000,000 fr., though in the year 1891 there was a slight increase in the export. South America and the French colonies are always open to the trade, the finest and purest Normandy butter being reserved for the Paris markets. In the year 1889 the export of margarine manufactured in France to the English markets was estimated at 3,100,000 fr. In 1890-91-92 the export slightly decreased. Mr. Leeson also mentions that "the fairest and most thriving dairy district about Bayeux and Isigny is being drained of the cream of its produce for the purpose of feeding and aiding in the production of margarine, that is actually destroying a wholesome trade." A recent proposal for the purpose of detecting the presence of margarine in pure butter has been made to colour the compound with a preparation of the bugloss or ox-tongue plant, that produces a deep pink colour.

DR. NANSEN'S EXPEDITION.—It was necessary that all the provisions taken for this Expedition should keep good for at least seven years, and be of the very highest quality of their kind. We understand that Messrs. Cadbury, of Bournville, have supplied about 1,500 lbs. weight of their Cocoa Essence and Chocolate in hermetically sealed tins.

DERBYSHIRE AND DAIRY FARMING.

The Technical Education Committee of the Derbyshire County Council report of the work of the Dairy School as follows:—

"Butter-making.—Winter lectures have been given by Miss Barron at the following centres, to audiences as stated:—Melbourne, 40; Duffield, 50; Cubley, 50; Handley, 80; Clay-cross, 110; Walton, 35; Wadshelf, 60; Higham, 60; Long Eaton, 60; Belper, 110; Etwell, 80; total, 735.

"The summer tour of the Dairy School was arranged to commence at Darley Dale. Fifteen applications for courses have been received, and probably a sufficient number will be sustained to keep the staff of the school occupied throughout the whole summer. One of the applications received was made in connection with the Bakewell Agricultural Show, and the Derbyshire Agricultural Society sent in an application for a competitive demonstration.

"Cheese Making.—Your Committee have considered it desirable to start instruction in this important branch of industry, and have held a competition at Brailsford to guide them in the selection of a capable teacher. Cheese-makers from all parts were invited to make a stated quantity of milk up into the Derbyshire shape. Eighteen competitors entered and presented themselves. The cheese will be judged when suitably ripe, and the competitor whose system is most teachable, and whose cheese fetches the greatest money return per gallon of milk, and who otherwise satisfies the Committee, will be appointed teacher with the sanction of the Council at a salary of £120 for the season.

"Principles of Agriculture.—The Higher Grade centres at Derby and Chesterfield have proceeded satisfactorily. The Rural Classes held at twenty-one centres have in most cases proceeded steadily, and the organising secretary has found from his inspection that a considerable proportion of the students have adhered to the classes throughout the session. Considering the newness of the organization, the amount of useful work done has been very encouraging."

MONTROSE AND MILK ANALYSES.

At a meeting of the Police Commission, on the 13th, a report was read from Mr. Wilson, Sanitary Inspector for the Burgh, stating that during May 47 samples of milk had been analysed, and that the result was satisfactory when compared with the quality of the milk analysed about the same period last year; but in several instances there was yet room for improvement. Provost Mitchell said he had got a synopsis of the sampling. It showed that, during 1892, 136 samples of milk were analysed, and showed an average of 2.89 per cent. of fat; and during the five months of the present year 47 samples had been analysed, and the average of fat was 3.09 per cent; but since then 45 samples of the last series had been found to contain 3.15 per cent. of fat. The Provost mentioned that Mr. Wilson had put himself to the trouble of communicating with other Burghs to ascertain what their percentage of fat was, and in Arbroath and Brechin the result showed a slightly better percentage than 3.15, but on the whole, with the exception of two samples, the results showed that the milk supply of the Burgh might be reckoned as in a fairly good condition. The Inspector would still continue the same supervision over it, as it was of great importance to the community that the quality of the milk supply should be kept up to a proper standard. Mr. Ford said it would be a great check on adulteration if the names of defaulters were given. Provost Mitchell said that that point was before a previous meeting, when a small Committee was appointed to consult with Mr. Wilson, and that Committee had every confidence that everything was being done that could be done to keep up the quality of the milk. The subject then dropped.

ADULTERATED MILK IN CLECKHEATON.

At the last meeting of the General Works Committee of the Cleckheaton Local Board, the Sanitary Inspector (Mr. Holdroyd) reported that he recently took eight samples of milk from dealers in the district and sent them to the County Analyst for examination; and he now submitted the Analyst's report. Two of the samples were reported to be of suspiciously poor quality, but the results were not sufficient to justify their condemnation as adulterated; one was of "somewhat inferior quality," three were of fair average quality; one was genuine; and one consisted of 84 parts milk and 16 parts added water.

AN ENCOURAGING SIGN.

CREAMERIES IN THE SOUTH OF IRELAND.—A conference of creamery managers has been held in Limerick, to consider the advisability of paying for milk according to its quality, or the amount of butter fat it contains; and also to ascertain what system of testing should be adopted. Mr. J. Blount, of Limerick, occupied the chair, and there was a very large representative attendance. The meeting was of opinion that the price of milk should be regulated according to the amount of fat it was found to contain upon analysis. It was agreed the test should be applied by some disinterested person. And a resolution was agreed to, inviting Analysts to state the lowest price per sample at which they would analyse milk for creameries. A sub-committee was formed to arrange details, and the conference passed a resolution expressing its opinion that Sergeants of all police-stations should be appointed Inspectors under the Food and Drugs Act, so as to empower them to take samples of the milk supplied to creameries and institute prosecutions whenever adulteration was detected.

THE SOUTH DUBLIN UNION AND ADULTERATED MILK.

A report from Sir Charles Cameron gave analyses he had made of six samples of milk sent to him from the workhouse. He stated that in one case the milk was adulterated with at least 6 per cent. of water; that in three cases the milk was of poor quality; and he considered that all had been more or less reduced in quality.—The Chairman: We cannot sustain prosecutions.—Mr. Mooney: You can in the six per cent. case. I think the party who supplied that milk should be prosecuted.—Captain Boyd: Try it, at any rate.—An order was made that there should be a prosecution in that case.

IMPORTED MILK AND INFECTION.

The *Yorkshire Post*, June 10th, calls attention to a danger we have repeatedly commented upon—

"Our Agricultural Correspondent calls attention in his Notes this week to a grave danger to the public health of this country by reason of the importation of foreign milk. In this country our best cowhouses and dairies are subject to inspection by the sanitary authorities; and, by the way, it is to be feared that the inspection is not carried on nearly so rigorously in the rural districts as it usually is under the urban authorities. But here we have milk brought in cold chambers from Hamburg and from Dutch ports without any possibility of inspection of the premises on which it is produced. The German or Dutch farmer and his family or his cattle may have all the infectious diseases known to medical science; there may be diphtheria, scarlet fever, and tuberculosis, or even cholera, in the milk, and there is nothing to prevent its being shipped, received, or consumed. So disease may be hawked about the streets of London, where the foreign milk is chiefly, if not entirely, consumed. Here is another case where the origin of a product which forms food for the people ought to be made known to the consumer. Let the man who sells foreign milk have the place of its production plainly set forth on his vehicle, and be compelled to tell his customers that it is "Amsterdam" or "Hamburg" milk, as the case may be, and if the cholera is raging in Hamburg he will not sell much of that milk. This is peculiarly important, because milk readily lends itself to the nourishment of the bacteria of the most fatal diseases. Here in this country, as we have said, the inspection of all that belongs to the sale of milk is not all that it ought to be. But we do not want foreign competition and disease combined."

The *Yorkshire Post* might have gone further, and said, that in addition to the risk of infection, all this German or Dutch milk is mixed with boric acid, which in those countries is an adulterant and not allowed to be used in food stuffs on account of its bad effect on the consumer. Why our Government allows its use in food is a mystery.

EXPOSING UNSOUND FISH.

At the Borough Police-court, Preston, on the 2nd inst., John Wilson, fish dealer, Walker-street, was summoned for exposing 24 kippered herrings which were unfit for human food, on the 28th April. The Town Clerk prosecuted, and Mr. Blackhurst appeared for the defendant. Inspector Marsden stated that on the 28th April he visited the defendant's shop in Walker-street, and found 24 kippered herrings on a box in the shop. They were very mouldy and badly decomposed. The fish were afterwards destroyed on a magistrate's order. Dr. Pilkington stated that he examined the herrings, and found them mouldy and quite unfit for human food. For the defence, Mr. Blackhurst said what the magistrates had to decide was whether or not the fish were exposed for sale. He contended they were not; but the Chairman, after the magistrates had retired, said they had decided by a majority that they were exposed for sale, and a penalty of 2s. 6d. and costs, or seven days, would be imposed.—Betty Hogg, fruiterer, Fishergate, was summoned for exposing for sale 19 bloaters unfit for food, on the 28th April. Inspector Marsden said he visited the shop of the defendant, and found outside, under the window, a number of bloaters exposed for sale. They were decomposed, and he took them to the police-station, and obtained a magistrate's order for their destruction. Dr. Pilkington said he was in company with Inspector Marsden when defendant's manager, Woods, who appeared for her, said the bloaters had gone bad all at once. He had given 1½d. each for them, and was selling them at ½d. each. They smelled very bad and were much decomposed. They were quite unfit for food, and it would be dangerous for anyone to eat them. Woods, in reply to the Chairman, said he had nothing to say, and the case being considered proved, Mr. Rideal said it was a very bad one, as he appeared to have known the fish were bad. A fine of 20s. and costs, or 14 days, was imposed.

THE DANGERS OF TINNED FISH.

A FAMILY POISONED AT RICHMOND, YORKSHIRE.

On the 15th inst., Leonard Allen, a small farmer living at the Richmond racecourse cottage, his daughter Lily, and son Walter, were taken seriously ill through partaking of tinned salmon. Medical aid was sent for, and every effort made to restore them, and by the following morning the father had come round wonderfully. The son, however, was very poorly and the daughter very ill, and suffering acute pain from the poisonous food.

MORE POTTED MEAT POISONING.

At Bracebridge, a suburb of Lincoln, a number of people who recently attended a congregational tea party in connection with a chapel, and partook of some potted meat, have been seized with a serious illness, and are at present under medical advice. The party consisted of about thirty people, and it is reported that about twenty-eight of those present are suffering from what appear to be symptoms of irritant poisoning. In one house the father, the mother, five children, and a lodger, all of whom partook of the potted meat, were on the following morning stricken with severe attacks of vomiting and diarrhoea, intense abdominal pains, and high fever.

MEAT PROSECUTIONS.

At Cambridge Borough Police-court, on the 3rd inst., H. J. Poole, butcher, Comberton, was charged with having, on the 18th May, exposed for sale meat which was unfit for human food. In opening the case, the Town Clerk (Mr. Whitehead) said action was taken under Sections 116 and 117 of the Public Health Act. On Thursday, May 18th, Mr. Taylor, Sanitary Inspector, Cambridge, in consequence of information given him, went to the East-road, where he found the defendant in custody of a cart, on looking into which he saw the body of a steer wrapped up in a cloth. The Inspector asked defendant what he was going to do with it, and he said he had just come from Eastman's. The carcase was taken possession of, and on the following day, when examined by Drs. Hough and Adams, it was condemned and afterwards buried. Inspector Taylor said the carcase was taken into the Medical Officer's room. It was covered with a quantity of flour, apparently to absorb the moisture. Inspector Taylor further stated that he seized the meat in consequence of suspicious circumstances, by it being covered up in a cart and hawked about. When taken possession of he considered it unwholesome. Dr. Bushell Anningson, the Medical Officer of Health, stated that being out of town when the meat was seized he was unable to examine it until seven o'clock in the evening, and it was then too dark to justify him coming to the conclusion that it was in an unfit condition to be eaten, although there were circumstances which led him to be suspicious. It was dressed as veal, although it was too large for ordinary veal. About eleven o'clock on Friday morning he again examined it, when he found that the animal was emaciated, there being very little fat on it. He did not think it had died from choking, but had evidently been bled whilst the heart was still acting. The hair came off readily, from which he gathered that it had been ill from a wasting disease. He did not consider it was fit for human food. The magistrates said the case had been conclusively proved. It was a very bad one indeed. When men ran a risk, they must suffer the penalty when they were found out. The Justices had power to send men to gaol without the option of a fine, but in this case they did not intend to pursue that course, although, to mark their sense of the gravity of the offence and the mischief which might have been caused—as the law said that the penalty must be great—the sentence would be that defendant be fined £10 and costs, or £13 4s. in all.

We are pleased to record this instance of energy on the part of the Cambridge Inspector, and would be pleased to record some energy in the administration of the Food and Drugs Act, which, we are sorry to note, are practically a dead letter in Cambridge, to the great injury of English agricultural industries.

At Warrington Borough Police-court, on the 5th inst., John Bradbury, butcher, 197, Winwick-road, was charged with exposing for sale, on the 29th May, 43 lbs. meat which was unfit for human food. The Town Clerk (Mr. J. Lyon Whittle) prosecuted. Inspector Norman deposed that on the day in question he was walking along Winwick-road, when he observed in the window of the defendant's shop a quantity of beef and mutton which he thought was unfit for human food. He went in and examined it, and found it in a state of decomposition. The defendant was not in, and witness called the attention of the defendant's son to the meat. The meat was not diseased; it had simply been kept too long. Dr. Gornall stated that he examined the meat, and found it in an advanced state of decomposition. He ordered it to be destroyed. Defendant said the meat was all right when he closed the shop on Saturday night. He did not see it on Monday morning, as he left the shop before the shutters were down. The Bench inflicted a fine of 20s., including costs, and remarked that the defendant was liable to a fine of £1,140.

James Edward Pullen, of Clarence-street, Landport, was summoned at Portsmouth Police-court, for exposing fifty bloaters in the fish-market at Point which were unfit for food. Mr. King prosecuted, and Mr. Hyde defended. The seizure was made on the 15th of February by Sanitary Inspector Monkcom from a consignment of 35 boxes, and the fish were condemned by Mr. J. Carpenter, J.P. Mr. Hyde: Did the defendant not ask you to examine the fish? Mr. Monkcom: After I had made the seizure he told me that he had some boxes he wanted me to see. William Thompson said that the fish were not exposed for sale, the boxes not having been opened until the Inspector did so. He, however, had bought five of the boxes. Dr. B. H. Mumby, the Medical Officer of Health, said that the fish were decomposed and unfit for food. The Magistrates said they had no doubt in the case. They convicted and fined the defendant 2s. for each of the 50 fish—£5 and £1 costs.

PUBLIC HEALTH PROSECUTIONS.

SMALLPOX NOTIFICATION PROSECUTION AT LEICESTER.

A case of considerable interest to the medical profession was heard at the Leicester Borough Police-court on the 14th inst., arising out of the recent outbreak of smallpox. Mr. Reginald James Bray, a surgeon practising for five years past in the town, was summoned for failing to notify to the authorities that James Burbank, one of his patients, was suffering from smallpox. The case was instituted by the Sanitary Committee, for whom the Town Clerk appeared, and it was the first ever entered against a medical man under the Corporation Act of 1879. There was one prosecution under the same Act a few months ago, but that was against a layman. The patient in question was a fishmonger, named Burbank, living at Avenue-road, North Evington. According to the Town Clerk's statement Dr. Bray attended him from the 8th or 9th of May until the 20th, during which time he was allowed to go about his business. The allegation for the prosecution was that the man was during that time suffering from smallpox. He is now an inmate of the infectious hospital. Dr. Priestley, the Medical Officer of Health, stated that on June 1st he visited a Mrs. Wright, Burbank's daughter, whom he also found suffering from smallpox, and to be in a condition of danger to the neighbours. Witness was of opinion that Burbank sickened for the disease on or about the 6th of May, and that the spots began to appear on May 8th, as the disease was two or three weeks old when he examined the man. He had counted at least 50 stains left on Burbank's face and 100 on his legs, and his body was spotted all over. Witness added that he also had under his care some of Burbank's neighbours who had been in the habit of going into his house.—In cross-examination, Dr. Priestly admitted that it was extremely difficult to differentiate between chicken-pox and modified small-pox, and that he had himself made a serious mistake in one case. He had never seen pustules after influenza. There were six or seven other persons in Burbank's house. They were all well vaccinated, and none of them had taken small-pox.—Mrs. Burbank said that Dr. Bray said her husband was suffering from influenza, and he had treated him for that. The daughter of a neighbour had been living with them, and carried on dressmaking in the house. Mr. Fowler, for the defence, said that they did not admit that the man suffered from smallpox, but even if defendant had made a mistake it was an honest one, and such as any medical man might have made under the circumstances. Before coming to Leicester Dr. Bray went through two small-pox epidemics in White-chapel, and therefore had had considerable experience. There had been a difference of opinion among medical men respecting several cases in the borough lately, and in the one under notice there was a considerable doubt as to whether the man really suffered from small-pox.—After twenty minutes' deliberation the Bench came to the decision that defendant had been guilty of a grave error of judgment, but that the evidence was not sufficient to convict on a charge of wilfully neglecting to certify the case.—The summons was therefore dismissed.

A POLLUTED WELL.

At Crowborough, William Harman, builder, of Crowborough, was summoned at Mark Cross Petty Sessions, on the 13th, at the instance of Mr. John Taylor, Inspector of Nuisances, for having a polluted well on his premises at Whitehill, Crowborough. The Inspector said that on April 27th he visited defendant's house in company with Dr. Fussell, Medical Officer of Health, and took samples of the water from the well. Analysis showed them to be bad. Witness wrote to the defendant, but nothing was done to the well, and the matter was reported to the Rural Sanitary Authority. Again, on 27th of May, witness found the water unfit for use, and further samples were sent to Dr. Fussell. There was not much water in the well. Alfred Jacques, occupier of the house near the well for two years, said that about two months ago he had to fetch water from a distance, as the well water had become unfit for use. Dr. Fussell, Medical Officer of Health for East Sussex, confirmed as to the bad condition of the samples he had examined. It was, he said, vile water, full of organic matter, and totally unfit for drinking. On behalf of defendant, it was contended that the well had been cleansed and deepened. The Bench ordered that the well should be closed within twenty-four hours, and remain closed for two months.

UNCLEANLY WORKSHOPS.

At Fenton on the 7th inst., Messrs. Plant Bros., earthenware manufacturers, Dalehall, Burslem, were summoned by Mr. J. H. Walmsley (Inspector of Factories) for not keeping their factory in a cleanly state. The Inspector stated that on visiting the Crown Pottery, occupied by the defendants, on the 19th ult., he found three rooms used by the hollow-ware pressers and the drying-stoves connected therewith in a very dirty state. The floors appeared not to have been swept for a long time, being covered with dust from clay. It was of the highest importance, in the interests of the health of the workpeople, that this dust should not be allowed to remain about the workrooms. The other parts of the factory were not very clean, but Mr. Plant had promised to see that the works were kept clean for the future. The Stipendiary asked if the clearing away of the dust was not a matter for the workpeople themselves? The Inspector said it was proposed in future to make the workpeople equally liable, but that was not the law at present. The occupier only was responsible. The defendants were fined 20s. and 9s. costs.

PLYMOUTH.

At Plymouth Petty Sessions on the 8th inst., Maria James was summoned for allowing her house, 19, Morley-lane, to be in an unsanitary condition. The Town Clerk (Mr. Ellis) asked not only for an order to close the house, but for a penalty, as defendant had been frequently warned to clean and put the house in proper condition. Evidence having been given by Dr. Williams, medical officer of health, and Mr. Strathan, sanitary inspector, the Bench ordered defendant to cleanse the house within a month. If the order was not complied with the house would be closed.

OVERCROWDED LODGING HOUSE.

At the Pontefract West Riding Court, on the 10th inst., Joseph Castelow, common lodging house keeper, of Castleford, was summoned for using ordinary kitchens, contrary to the Public Health Act, as sleeping apartments.—Thomas Spencer, Sanitary Inspector, Castleford Local Board, stated that he visited the lodging house in question at 12 o'clock on the night of the 26th May and found two men, two women, and a girl sleeping in a kitchen. The proprietor of the house and his family were sleeping in another living room, whilst a third kitchen was similarly occupied.—Mr. Kemp defended, and said his client had taken in the persons found in the house out of charity, or they would have had to walk the streets all night.—It was held that the Inspector had been in the habit of giving persons tickets to go to certain lodging houses. It was shown that when the Inspector visited the lodging house there were 36 lodgers upstairs and 9 in the three kitchens.—Fined £2 and costs.

SPREADING SCARLET FEVER.

At Exeter Police-court, on the 9th inst., Mary Catherine Hearne, of 2, Cricklepit-street, Exeter, was summoned for selling a quilt which had been exposed to infection from scarlet fever, without first disinfecting the same. The Town Clerk (Mr. G. R. Shorto) prosecuted, and called Mr. Wreford, Sanitary Inspector, who stated that a child of the defendant had recently had scarlet fever, and had been removed to the Sanatorium. On June 1st another child was suffering from the same complaint, and was also removed. Calling at the house the following day, witness found that a quilt which had been used on the bed of the sick child had been sold to a marine store-dealer. He proceeded at once to the store and ordered the quilt to be burned. Sydney Eakers, who bought the quilt, stated that he gave 5d. for it. Dr. Clapp stated that he had visited both children during their illness, and had remarked on the dirty state of the bedding. In defence the defendant said she was compelled to sell the article in order to get food. The magistrates took a lenient view of the case and ordered the husband of the defendant to enter into a recognisance of £1 to bring his wife up for judgment when called on.—John Bott, of Summerland-street, was also summoned by the Town Clerk for wilfully exposing himself in Summerland-street, whilst suffering from scarlet fever, on the 18th of April last. The defendant said he was sorry for what had happened, but he did not know he was suffering from the disease. The magistrates fined him £1.

INSANITARY DWELLINGS IN GLASGOW.

At the Eastern Police Court, on the 13th, Bailie Alexander on the bench—a house factor, named John Porter, was charged with neglecting to put proper sanitary appliances into certain dwelling-houses in Waterloo and St. James Streets. The evidence showed that he had been warned of the defective sanitary arrangements in the buildings, and had been instructed to have them remedied. He, however, paid no attention to the sanitary officials, and they accordingly prosecuted him. The Magistrate found the charge established, and imposed a fine of £3, with the alternative of 21 day's imprisonment. The Magistrates also instructed accused to have the buildings in question put into a proper sanitary condition at once, and in order that the arrangements be carried out as soon as possible, for every day that elapsed between this and the sanitary completion of these arrangements the accused would have to forfeit a sum of money.

SANITATION IN THE ISLE OF MAN.

INSANITARY PREMISES.

At Douglas, on the 9th inst., the case of the Douglas Town Commissioners against William Collister came before his Worship the High-Bailiff. Mr. Claude Cannell appeared for the Town Commissioners. The suit was for an order to compel defendant to put certain premises situate in St. George's-street into a sanitary state of repair. The matter had been adjourned on two previous occasions to allow Collister to make his house sanitary and fit for habitation. In reply to his Worship, defendant said that the work was proceeding as hard as they could go. His Worship: Work that should have taken 24 hours has taken you 24 days. Defendant: We have been doing all we could; but the money is not so flush now. His Worship: How long will it be before it is finished? Mr. Cannell: I would ask your Worship to fix a time. His Worship: I will fix it a week to-day, and by that time the house must be finished. The case was then further adjourned for a week.

MORE INSANITARY BOARD SCHOOLS.

At a meeting of the Poplar Board of Works, the Sanitary Committee brought up a long report of sanitary defects in the Board schools of the district. Directions were given for the issue of the necessary notices, and the Rev. E. Hoskyns, M.A., rector of Stepney, at a School Board meeting on Monday evening, referring to the subject, remarked that it seemed strange, after the lavish expenditure on Board schools generally, that such scandals in regard to sanitary defects should arise.

LOWESTOFT WANTS A SANITARY INSPECTOR.

Lowestoft is a little in advance of Sunderland in its idea of a generous salary, but not much. Our readers will remember that Sunderland resolved to advertise for a Sanitary Inspector possessing the certificate of the Sanitary Institute, salary £80. The Lowestoft Sanitary Committee at their last meeting recommended that an advertisement be inserted in the papers for applications for appointment as Inspector of Nuisances to the Lowestoft Urban and Port Sanitary Districts, at a salary of £80 per annum for the Urban District and £20 per annum for the Port District, the person appointed to hold a certificate of the Sanitary Institute.

We have not yet received the advertisement of the generous town council, and we don't want it. We feel that poverty like that of Lowestoft needs help and sympathy, and we give their wants a gratis advertisement, having no doubt whatever that if they get an Inspector holding a certificate at such a salary, the salary will be quite worth the man. But we cannot understand how any Sanitary Committee can have so little self-respect as to shame itself by offering such a salary.

THE CHISWICK LOCAL BOARD AND SANITATION.

At the last meeting Mr. Waters started a discussion on the sanitary condition of the Glebe estate. He saw by the Medical Officers report that its condition was undoubtedly suspicious and alarming. He wanted to know how that was, and who was responsible, whether the Medical Officer, or whom? It was, he considered, a scandal, not only to Chiswick, but to civilisation, that such a state of things should exist. The Chairman particularly remarked that the new Inspector would be responsible. Mr. Waters, however, could not see why he should. Mr. Phillimore thought new brooms swept clean, and therefore the new Inspector might make a difference in the locality. Mr. Waters said that he would like to know that night who was going to be responsible. Mr. Phillimore said they had a Medical Officer, and he would be responsible. The other officers (the Inspector) was only the mouth piece of that gentleman. Mr. Waters moved that a report be presented at the next meeting upon the subject. This resolution was agreed to.

SOLIHULL SANITARY AUTHORITY AND THE BIRMINGHAM HEALTH COMMITTEE.

At a meeting of the Solihull Sanitary Authority, held at the Union Offices, Solihull, on the 7th inst., Mr. C. Madeley presiding, the Sanitary Inspector (Mr. W. Harris) reported that during the preceding fortnight he had discovered 37 nuisances, 7 filthy and dilapidated houses, 4 bad wells, and 2 houses in which infectious disease existed. On the 26th ult. he received serious complaints from the residents of Lincoln-road and other parts of Acock's-green with regard to the deposit by the Birmingham Health Committee of a boat-load of fish offals, rotten poultry, market refuse, &c., in a field in the neighbourhood named. The manure, it was said, had been a serious nuisance to everybody living within a mile of the place. Such deposits had been very frequent of late, and constituted a great and, in fact, intolerable nuisance. He suggested that the Authority write to the Health Committee of the Birmingham Corporation drawing their attention to the complaints received, and requesting that in future no filth of the nature referred to should be deposited in any but the most isolated spots. He had heard of several cases of sickness within the district affected by the nuisance.—It was said that the boat-load referred to had previously been sent by the Health Committee down to Bromsgrove, and there rejected as absolutely dangerous to health. Complaints of a similar nature had, it was said, been received from Earlswood.—It was decided to draw the attention of the Health Committee to the matter.

THE SANITARY INSTITUTE.

At an examination for Local Surveyors, held in London on June 9 and 10, seventeen candidates presented themselves. Questions were set to be answered in writing on the 9th, and the candidates were examined *viva voce* on the 10th. The following eleven candidates were certified, as regards their sanitary knowledge, competent to discharge the duties of Local Surveyor:—Albert Edward Adams, 5 and 6, Palmer-street, Frome; Gilbert Thomas Bassett, Highfield-road, Saltley, Birmingham; Harold Busbridge, 96, Herbert-road, Plumstead; Ernest John Elford, City Engineer's Office, Norwich; Harry Frederick Haddock, 9, Eland-road, Lavender-hill, S.W.; Leonard William Hogbin, Borough Surveyor's Office, Faversham; Joshua Lambert, Local Board Offices, Tottenham; William Phelps, 32, St. Stephen's-avenue, Shepherd's-bush; Thomas Keat Scott, Town Surveyor, Whitby; Joseph Spink, Formby, near Liverpool; Ernest Worrall, 9, Beaconsfield-terrace, Seacombe, Liverpool.

SANITARY INSPECTORS REQUIRED AT HOLYHEAD.

At the Holyhead Local Board, on the 14th instant, Dr. Wm. Evans, the Medical Officer, alluded to the unsatisfactory condition of the ash-pits, manure heaps, and drainage in several localities, and recommended that an independent Inspector be employed for a short time, and to furnish a report to the Board, on which they should act. A petition has been sent by about 100 of the inhabitants of Kingsland, protesting against the manure yard, which is situated in their vicinity, and asking the Local Government Board to interfere and order its removal. Capt. Cay, R.N., condemned the contemplated action of the local authorities in allowing cholera patients to be landed at Salt Island, Holyhead.

THE PRINCE OF WALES AND INSANITARY PROPERTY.

At the meeting of the London County Council, on June 6th, a report of the Public Health and Housing Committee led to an animated debate. The Committee explained that their attention had been drawn to the Salutation-place area, Lambeth, in which the houses are in a bad condition. There are no back yards, the ground floors are below the surface, there is no through ventilation, and some of the ground floor rooms are damp. The area forms part of the estate of the Duchy of Cornwall, which had been asked whether it would be prepared to reimburse the expenditure incurred by the Council in dealing with the property under Part I. of the Working Classes Act, 1890. The Duchy, in reply, contended that the Act did not apply to its possessions, and pointed out the desirability of waiting for the expiration of the leases in 1909, and raised other difficulties. The Committee regretted that the Duchy "had not shown more readiness to put an end to this insanitary blot in its property, even at some monetary sacrifice," and went on to point out that there was no alternative but to ask the Council to deal with the area out of public funds. They accordingly submitted a recommendation authorising them to prepare a scheme for dealing with the area under Part II. of the Act.

Mr. Benn, M.P., acting upon a resolution passed by the General Purposes Committee, of which he is Chairman, moved an amendment to the effect that, in view of the circumstances stated in the report, it was not desirable that public money should be spent to improve the property, and that the Committee's report should be sent to the Duchy. After Mr. Charles Harrison (the Vice-Chairman) had seconded this amendment, Mr. Leon, Chairman of the Committee reporting, expressed his willingness to accept it, remarking that the recommendation had only been brought forward to draw attention to the facts of the case. Mr. Lloyd, supporting the amendment with some warmth, said that of course they all knew that the Duchy of Cornwall represented the Prince of Wales, who drew the revenue from the property and was responsible in the matter. This reference brought Commissary-General Downs to his feet, with an inquiry whether it was in order for an hon. member to mention "such a name" in the debate. To this the Chairman replied that, in his opinion, it would be desirable for members to make their references to the Duchy rather than to his Royal Highness. Ignoring this hint, Mr. Lloyd proceeded to claim additional weight for the arguments in support of the amendment from the circumstance that the Prince of Wales had been a member of the Royal Commission that had inquired into the housing of the working classes, and amid some murmurs of deprecation he declared that "these ground landlords of London" ought not to throw upon the rates the burden of keeping their dirty and insanitary property in order, adding, "If they had any sense of justice, and any regard for humanity and their fellow citizens they would not do so."—The Rev. Fleming Williams followed in a somewhat more conciliatory vein. "I desire," he said, "to speak with abject respect"—whereat there was laughter—"of His Royal Highness the Prince of Wales, but in the interests of the respect with which we desire to surround the exalted station he occupies, we ought to compel his attention to a scandal which cannot long be concealed from public view." The speaker proceeded to describe the insanitary conditions of the area, which he declared to be "as vile a spot as you will find in London." These speeches were received with mixed expressions of approval and disapproval, the only point on which there appeared to be unanimity being as to the desirability of proceeding at once to the vote.—The Chairman accordingly put the amendment, which was carried, no hands being held up in opposition. With evident relief the members were about to deal with other business, when Mr. Thornton sprang to his feet and moved the adjournment of the Council. This development occasioned general surprise, and there was a manifest curiosity to learn under what sense of grievance the hon. member had resorted to this expedient. It transpired that Mr. Thornton, who had some supplementary remarks to make about the Prince of Wales, felt that a longer discussion of the subject would have been desirable—an opinion in which he was presumably alone, as no seconder could be found for his motion.

THE SANITARY STATE OF PORTDINORWIC.

The drainage and water supply question at Portdinorwic was again the subject of considerable discussion at the last meeting of the Carnarvon Urban Sanitary Authority. It was announced that several houses, including those forming Terfyn-terrace, had been connected with the drains, but that the flushing thereof depended entirely upon the supply of rain water in cisterns. Replying to Mr. Menzies, the surveyor (Mr. R. H. Parry) said that the Bush Spring, from which it is intended to supply a reservoir proposed to be constructed under a scheme adopted by the authority, now only gave a gallon and a half of water per minute. Mr. Menzies and other members expressed an opinion that the authority was bound to provide a supply of water for flushing the drains which had been connected with the houses. Two schemes were to be submitted to the consideration of the ratepayers of the parish, one being the construction of flushing tanks at various points. The Parochial Committee wrote requesting the Local Government Board and the Sanitary Authority to desist from taking further steps at present in the construction of the Bush reservoir. No action was taken with regard to this communication.

IMPORTANT QUESTION IN HOUSE WARRANTY.

On June 17th, before Mr. Justice Grantham, the case of "Jordan and Uxor v. Morley" came on for hearing.

This was an action by both plaintiffs for a breach of warranty and misrepresentation as to the sanitary condition of a house, 1d, Buxton-road, Leytonstone, and for damages for a false imprisonment of the female plaintiff on September 19th, 1892. The defendant counter-claimed for three weeks' rent at 10s. a week—30s.—which was admitted. It appeared that the plaintiff, who is an insurance agent, took the house in question of the defendant on June 22, 1892, and moved into it next day with his wife and four children. According to his story the defendant had distinctly told him that the drains were in a good state when he took the house. But on taking possession the plaintiff and his wife discovered that there were black mud and slime coming from a drain in the back premises, and a very bad smell all over the house. The plaintiff's children were taken ill with sore throats, which gave way to scarlet fever about the middle of July, and this was followed by diphtheria. The plaintiffs were engaged nursing their four children night and day for several weeks, and gave the defendant notice to quit. They claimed some £12 for extra nourishment—milk, eggs, jelly, rabbit broth, and beef tea—and the plaintiff's wife had to get her mother to nurse her afterwards, and had to pay her 5s. a week and 10s. a week for board, &c.; doctor's fees, two guineas; and loss of husband's business £3. The plaintiff, owing to this increased expense from sickness, got into arrear with his rent, and when he left, on September 19th, was some three weeks in arrear. On that day the defendant came, and the plaintiff's wife said she offered him the key of the house, which he would not accept, and she then started off for the new house, which her husband had taken at 66, Valetta-grove, not very far off, when the defendant followed her and got into the tramcar, having called a policeman, and threatened to look her up. Mrs. Jordan said the defendant was violent and shook his fist in her face, and gave her in charge of a police-constable, who took her to the West Ham Police-station. When at the Police-station she could not give her new address as she did not know it, but was to find it by her children and a pantechnicon van sent on before her. On the inspector's telling them "they had better settle it outside" she went into Ham-park, where the defendant followed her and pursued her into a bootmaker's shop, where she arrived in a very flurried and exhausted condition. Mrs. Jordan was corroborated by her husband, a friend, a baker, a neighbouring lady, her doctor, and the bootmaker in question. The case for the defence was that the defendant had never given any warranty or representation as to the drains, and that he had not given the female plaintiff into custody at all on September 19th. He thought the plaintiffs were going to bolt from his house owing him some three or four weeks' rent, after having removed their furniture, and that, as Mrs. Jordan refused to give her name and new address except at the police-station, the defendant was obliged to accompany her there as he wanted to know where to apply for his money. As to the state of the drains the defendant called his agent and a Sanitary Inspector, who said the drains in the house hired by the plaintiff were in good condition and that scarlet fever was prevalent in the district in July last, as even the plaintiffs' doctor said it was not absolutely certain whether scarlet fever sprang from bad drains, though he thought diphtheritic throats certainly did. As to the imprisonment, the Police-constable and the Inspector were called, who said that the defendant had not given the plaintiff in custody, nor had they entered any charge on the sheets or books kept for that purpose. Mrs. Jordan had declined to give her name and address to the Police-constable, except at the police-station, and the Inspector had suggested the defendant's accompanying her to her new address, which she gave correctly.

Mr. Justice Grantham summed up. He pointed out the apparent contradictions in the case, and asked the jury to say which set of witnesses they believed. He left it to the jury to say if there was a representation by defendant to the plaintiff as to the wholesome state of the drains, and, if so, if there had been a breach of it; thirdly, had there been a false imprisonment of Mrs. Jordan by the defendant? If so, to what damages was she entitled?

The jury found a verdict for the plaintiffs, damages £60, and his Lordship entered judgment accordingly.

SEWER VENTILATION AT WEST HAMPSTEAD.

A numerous-attended meeting of residents in the Fortune-green and Mill-lane districts of West Hampstead was held on the 6th on West-end-green, Hampstead, "to consider the advisability of appointing a deputation of ratepayers to wait upon the President of the Local Government Board to urge upon him the necessity of at once appointing a Commission to investigate the present mode of ventilation of the main sewers in West Hampstead."—Mr. J. B. Wilkin presided, and said that during the past twelve months frequent complaints had been made of the "fearful emanations" of sewer gas from the sewers in that neighbourhood, and there was now an epidemic of scarlet fever and diphtheria.—Mr. George Saxby, who spoke with some amount of warmth on the subject, having recently lost a child, said he was one of the largest sufferers through diphtheria and scarlet fever in that neighbourhood. He condemned the system of road ventilators for the sewers, and read a letter from Mr. Baldwin Latham, C.E., in support of ventilating columns to carry the sewer gas above the houses, as well as a letter from Mr. J. G. Weir, M.P., sympathising with the object of the meeting. He also moved a resolution urging the President of the Local Government Board to appoint a Commission to inquire into the matter.—The resolution was carried.

SANITATION IN GLASTONBURY.

The primitive notions of some makers of butter and vendors of milk, and the dangers attending them are revealed in an able report by the Medical Officer of Health, who says:—

"I have had reported to me during the months of April and May two outbreaks of scarlet fever. The first in Chilwell-street, the origin of which I was unable to discover, although the sanitary surroundings of the house were very bad, large heaps of manure being allowed to accumulate within a few yards of the dwelling, and at a further distance, and in an adjoining property, was a furnace used for boiling up horseflesh and other offal, the stench from which was very offensive. I gave verbal notices to have the nuisances done away with, and the occupiers have complied with the same. I also gave notice to the occupiers of the house where the outbreak was, to discontinue the making of butter and selling milk until his premises had been properly disinfected. The other outbreak was in an isolated house at Edgarley, and was no doubt caused by the child being brought there from the neighbourhood of Bath, which had recently been exposed to the disease. During the past month there had been several cases of measles at Edgarley and Coursing Batch. I must draw your attention to the want of proper ejections to the houses numbered 21 to 35, Bere-lane. The occupants are in the habit of throwing their slops either in the gutter opposite or else on to the road. The closet accommodation is not sufficient, and is too far off. I drew your attention to this matter in my annual report for 1891, but up to the present time no steps have been taken to remedy the nuisances. The landlord has also been communicated with on the subject, but takes no notice."

It is gratifying to learn that the Inspector was given general powers to prosecute all offenders against the public health. But ought not the fact that butter is being made under such conditions, to nerve some English agriculturists to strive to do for England what an enlightened Government has done for Denmark? Co-operative creameries would pay as well in England and Ireland as in Denmark, and if the movement were earnestly taken up in England the Board of Agriculture could scarcely refuse to go a long way in helping it onward.

INSANITARY HOLYHEAD.—HOW NOT TO FIGHT CHOLERA.

At a meeting of the Holyhead Local Board on 7th inst., Dr. Rees said that doubtless they were aware that a great many complaints had been forwarded by the inhabitants of Holyhead to the Local Government Board respecting the sanitary condition of the town. He then proceeded to ask a series of questions relating to the main and house drainage of the locality, and as to the measures adopted for the removal of manure heaps. Dr. Evans, Medical Officer of Health, said that Holyhead had very few w.c.'s, and the ashpits were badly constructed. The town had three registered common lodging houses. Mr. Richard Hughes said that they were totally unfit for such a purpose. One to his knowledge had from seven to nine of a family, and only contained four rooms, these being small rooms, two only being bedrooms. The slaughter-houses, cow-houses, and milk-houses were private ones. Mention was made of the fact that the scarlet fever, which has almost entirely disappeared from the neighbourhood, was of a very mild type. Dr. Evans stated that he had suggested the closing of the schools, but the authorities had differed from him, and the schools were not closed. Dr. Rees said that he would have again to visit the neighbourhood, and very likely he would have to recommend the erection of an infectious diseases hospital.

A DISINFECTING APPARATUS WANTED AT CARNARVON.

At the last meeting of the Carnarvon Town Council, the Mayor (Mr. Bugbird) presiding, Dr. Reece, Medical Inspector of the Local Government Board, gave the result of the inquiry recently conducted by him with reference to the precautions against an outbreak of cholera. As far as he could see the arrangements of the Carnarvon Port Sanitary Authority were satisfactory, with one or two exceptions. He recommended that the Authority should adopt the Infectious Diseases Notification Act, 1889, and the purchase of a new disinfecting apparatus on their own responsibility or in conjunction with some other legally constituted Sanitary Authority. In his opinion the existing disinfecting apparatus was practically useless, and he urged that there should be a careful inspection of ships upon their arrival outside before they were moored in the harbour.

SEWAGE WATER FOR DRINKING AT MOLD.

At the monthly meeting of the Mold Local Board on the 14th inst., Mr. Thomas Bellis presiding, Mr. Edward Williams, Medical Officer, produced his report, which recorded that the locality of Millford-street, and especially the Henffordd, were in a filthy condition. The water for domestic purposes at Rhydygolen, which served for 18 houses, was unwholesome, and sewage was a visible contaminating agent. He pointed out a new evil with regard to pig keeping, which was the erection of wooden huts regardless of drainage, &c., and which required urgent attention. After discussion, the report was referred to the sanitary committee.

THE MAYBRICK CASE AND FLY PAPERS.

Sir,—The Maybrick case should convince us of the necessity for legislation regulating the trade in arsenic fly-papers. If the preparation of arsenic were not soluble in water, which happens in most instances, it would be satisfactory, but as arsenic acid and arseniate of alkalies are sometimes contained in those papers, it is evident that some concomitant should be insisted upon so as to prevent them being used for criminal purposes, and to avert accidents. I submit that if a certain quantity of albuminous preparation were present in the paper when washed out by water, or even with acid, the albumen would precipitate the arsenic, and render it comparatively harmless. This brings us to the consideration, was it possible in the ordinary course for arsenic, if placed in Valentine's Meat Juice, to be the source whence the one-tenth of a grain found in Mr. Maybrick's body was obtained? I think not. The albumen of the meat juice would precipitate, and especially if given warm, as no sick person drains the dregs of his cup, and there was no evidence of stirring or agitation of anything administered to Maybrick. Is it morally possible to extempore devise murder by poison. No one will admit it. If murder be intended, a knowledge of the properties of the drug to be administered will be acquired either directly from books and doctors, or by proxy, i.e., accomplice. There was no suggestion of such in the Maybrick case. Is it conceivable that a poisoner, knowing that arsenic is easily detected, and is precipitated to the bottom in Valentine's meat juice, would put it from her possession into a bottle of such fluid? Certainly not. Few like the tasting of poisons, and is it probable that the fear of detection would not urge the guilty to force the dose to be taken quickly, and at once dispose of the residue? Would not the source of supply be concealed? Would there not be a nervous officiousness displayed by telling the doctor that the medicine or the nourishment taken at the time of the poison, was disagreeing with the patient? About two years ago I was attending a patient for remittent fever with gastro enteritis, the patient was under treatment for several weeks. The temperature was normal in the mornings, above this in the evenings. This patient had for some days 10 to 16 drops of liq-arsenicalis daily, divided into small doses. One Sunday morning I was called, and my patient was much worse. I found her in a state of collapse, eyes sunken, voice choleraic, extremities cold, pulseless, burning thirst, pain over gastric region, and had had vomiting. Well, there were only a few doses out of the bottle, and the whole bottle only contained an eighth of poisoning quantity, there was thus assurance. On examination, there was found no arsenical signs in the lids or in the eyes, there were not any in the tongue nor in its margin the gums, and there was not diarrhoea. There were not the severe cramps but there was tenderness over stomach and intestines. My patient died on that day from exhaustion due to gastro enteritis. I will forfeit my liberty, if the body be exhumed now, and submitted to Dr's. Davies and Stephenson for analysis, that a tenth of a grain of arsenic will be found in it.

There are yet other affections that more closely resemble arsenic poisoning than does fatal gastro enteritis, they are malignant cholera and echislarinata snake bite. In Payrero Thanato-phidea of India will be found a case by the writer, in which the resemblance is stated, and the reasons why arsenic was the remedy used, and fortunately with success, and mark, success is very rare. In the cholera epidemic, 1869, in India, I tried arsenic, and in my report I mentioned the local sphere of action of arsenic is the same as of cholera. Arsenious acid does not act so much as a local irritant, as it does as an organic nerve irritant and paralyser; hence the petichral of stomach, intestines and skin, the lung spots, and the condition of liver and kidney, and the proneness to bleeding from stomach, bowels, margin of tongue, and even the lids. I have stood over a case of arsenical poisoning, made the post mortem, and analysed the viscera. I found some specimens demonstrated arsenic freely, and others from adjacent parts none at all, and was confirmed by Dr. Lyon, then Government Analyst, Bombay, and guilt proved. There is no theory more disastrous than that an ingested irritant is necessary for exciting gastro-enteritis, it is ever present in typhoid fever, and in remittent or gastric fever, for which reason the latter is annexed to the former by many authors, and certainly however rarely it is anti-genetic under physiological conditions.

As an instance of the vagaries in constitutions, I may mention that a child of mine ten years old partook of a portion of the dinner in a cottage where he wandered. He had that evening gastro-enteritis, vomiting, high fever, thick furred tongue, roseolar rash, later on furnuculi, and none of the others suffered in the least. For several years one of my children could not eat certain foods without getting gastric fever, i.e., gastro-enteritis. These facts may interest those who wish to study the Maybrick case.—Yours truly,

JOHN ROCHE, M.D.,
Retired M. Ml. Service.

CORRESPONDENCE.

Re PAPERS FOR GROCERS.--No. 3.

To the EDITOR OF FOOD AND SANITATION.

SIR,—In your report in *Re Fitzgerald v. Leonard*, you only give one side. I hope you will give me space to state a few facts relative to the case in question.

It is not a fact that I sold it with any fraudulent intent. I sell butter from the four provinces. I received this package of butter from the County Tipperary, from a party for whom I sold a thousand pounds worth of butter during the last eighteen years, and had no reason to suspect its being anything but pure.

Assuming this butter to be mine, which is not thoroughly cleared up yet, as she bought from other parties, and the evidence was contradictory.

I have been most particular at all times in selling butter as butter, and margarine as margarine.

I believe the only way to prevent the innocent suffering, is to dye margarine pink.—Respectfully yours,
10, Little-green, Dublin,
June 6, 1893.

JOHN LEONARD.

ANSWERS TO CORRESPONDENTS.

GROECR, HANLEY.—You will find genuine vinegars advertised in our Columns. The case of Panter Woodward's Vinegar is one on which at the present stage we cannot comment. We have not analysed Hills and Underwood's Vinegar. You had better write to the firm itself for a warranty if you propose dealing in their goods.

BAKING POWDER, SWANSEA.—The matter is still *sub judice*. Freeman and Hildyard, Dover-road, Boro', make a guaranteed pure baking powder free from alum. You would run no risk of prosecution if you stock their goods.

REVALENTA ARABICA, BRIXTON.—This food is healthy enough, but there is no occasion why you should waste money in buying it under its fancy name at a great many hundred times its value. You can obtain powdered lentils—which is really all this food is composed of—at most shops at a great deal less cost.

MELLIN'S FOOD.—We shall examine and report on in a future issue.

M.D., LEEDS.—Thanks for letter. Carnrick's Peptonoids will be dealt with in due course; also Bengers's Food. We are pleased to have your commendations of the meat extract analytical articles.

AGRICULTURAL IMPORTS.

Account shewing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended June 17th, 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities.	
	1892.	1893.
Animals living:—		
Oxen, bulls, cows, and calves	Number 11,031	9,724
Sheep and lambs	339	—
Swine	—	—
Fresh meat:—		
Beef	Cwts. 40,893	28,808
Mutton	18,226	7,563
Pork	756	780
Salted or preserved meat:—		
Bacon	73,517	52,093
Beef	9,151	8,212
Hams	83,346	17,841
Pork	4,223	8,267
Meat unenumerated, salted and fresh	2,860	4,131
Meat preserved, otherwise than by salting	9,975	12,742
Dairy produce and substitutes:—		
Butter	41,121	44,610
Margarine	20,952	22,392
Cheese	52,797	58,804
Condensed milk	8,324	9,556
Eggs	Gt. Hundr. 240,550	236,752
Poultry and Game	Value £ 2,507	2,215
Rabbits, dead (not tinned)	Cwts. 13	55
Lard	21,605	18,571
Corn, Grain, Meal and Flour:—		
Wheat	1,589,045	1,676,620
Wheat Meal and Flour	316,028	430,960
Barley	121,586	213,070
Oats	233,116	247,168
Pease	77,424	25,817
Beans	121,603	23,422
Maize or Indian Corn	506,347	718,984
Fruit, Raw:—		
Apples	Bush. 30,669	1,093
Oranges	—	10,495
Lemons	93,921	13,077
Cherries	29,471	56,809
Plums	1,885	1,293
Pears	4	73
Grapes	793	866
Unenumerated	26,751	85,055
Hops	Cwts. 736	2,653
Vegetables:—		
Onions, raw	Bush. 41,354	28,316
Potatoes	Cwts. 196,167	286,144
Unenumerated	Value £ 21,564	44,074

* Not separated in 1892

Statistical Office, Custom House, } T. J. PITTAR.
London, June 19th, 1893.

ABOUT 80 lb. of beef and mutton were brought to South-Western Police-court, a day or two ago, by Mr. Isaac Young, the Chief Sanitary Inspector for Battersea, who asked Mr. Haden Corser to make an order for it to be destroyed, the meat being in a diseased state. Mr. Young visited several shops in Battersea-park-road, and also Falcon-road, on Sunday morning, and took possession of all the meat he found diseased.—Mr. Haden Corser inspected the meat and ordered the same to be condemned.

DR. NANSEN HAS ORDERED "FRAME FOOD" JELLY, ETC., FOR HIS NORTH POLE EXPEDITION!

Dr. NANSEN writes—(February 11th, 1893)—"I have now carefully examined the 'Frame Food' Jelly and Stamina Tablets, and think they are very good. We shall, of course, use a great deal of the Jelly. I would give the men as much as 20 grammes each man each day. This makes a great quantity for 12 men in 2,000 days. Please send 1,200 lbs. Jelly, 200 lbs. Extract, and 300 lbs. Stamina Tablets."

WHEAT PHOSPHATES NOURISH BRAIN and FRAME, FORM BONE, TEETH and MUSCLE, and ENRICH the BLOOD



Is a Cooked Food
strengthened with the

"FRAME FOOD" EXTRACT of WHEAT PHOSPHATES, and therefore the MOST NUTRITIOUS FOOD in the WORLD.

For **INFANTS**; Developing Bones, Muscles, Teeth, Brain.

For **INVALIDS**; Restorative and Invigorating.

For **ADULTS**; A Delicious Breakfast and Supper Dish; Increases Vigour, Restores Strength.

$\frac{1}{2}$ -lb. Sample in handsome enamelled Tin sent free on receipt of 3d. to cover postage.

Sold by Grocers, Chemists, &c., in Tins, 1 lb. at 1s., 4 lbs. at 3s. 9d., or sent carriage paid by F. F. Co.

"FRAME FOOD" STAMINA TABLETS { INVALUABLE FOR TRAVELLERS, CYCLISTS, ATHLETES, and for all who require a temporary substitute for a regular meal. Sold by Chemists, Grocers, &c., in 6d. and 1s. Boxes, or sent carriage paid by

FRAME FOOD CO., LD., Lombard Road, BATTERSEA, LONDON, S.W.



Is made of the

"FRAME FOOD" EXTRACT of WHEAT PHOSPHATES and PURE CANE SUGAR, and is therefore MOST NOURISHING; it is DELICIOUS eaten as jam on bread and butter, an excellent substitute for MALT EXTRACT, being CHEAPER, NICER, and more NOURISHING.

"Frame Food" Jelly costs 7d. per lb., Malt Extract costs 3s.

Sold by Chemists, Grocers, &c., in jars about 1 $\frac{1}{2}$ lbs., at 1s.

Sample 1 lb. jar sent post free for 10d. by F. F. Co.

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from **MALT** and **BARLEY** only—without the addition of **RICE**, **MOLASSES** or **SUGAR**—and that no description of **ACID** is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.

IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. **SOLE MANUFACTURERS—**

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.
ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make **ONE** quality, viz.:—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.

"MALT-COFFEE."

(Patented.)

Prepared from delicious Mocha Coffee and Nourishing Malt. It does not excite the Nerves like pure Coffee, or affect the liver like Chicory, prevents and cures indigestion, and is as nourishing as Ale or Stout.

Grocers will find this a good paying Coffee, without risk of Prosecution.

MALT-COFFEE COMPANY.

(Proprietors, KRIKORIAN BROS.)

MONUMENT BUILDINGS, LONDON, E.C.

SMOKERS SHOULD USE CALVERT'S DENTO-PHENOLENE.

1s. 6d., 2s. 6d., and 1lb. 7s. 6d. Bottles.

A Fragrant LIQUID Dentifrice.

A DELICIOUS MOUTH WASH.

Editor of *Health* says:—"An elegant and agreeable Toothwash, most effectual for strengthening the gums in case of tenderness, and ridding the mouth of the aroma of tobacco."

Can be obtained at Chemists, or will be sent post free for value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

"SANITAS" DISINFECTANTS

Unlike most disinfectants—such as the Coal Tar products—do not rob the air of its vital Oxygen (so essential to animal life), nor merely hide the foul smells of decomposition by their own odour; they actually generate Oxygen in an active form, and destroy offensive matters and disease germs. Moreover, the "SANITAS" Disinfectants are non-poisonous, do not stain, are pleasant in use, and natural in character.

Apart from the important consideration that the "SANITAS" Disinfectants have emanated from a well-known chemist (Mr. O. T. KINGZETT, F.I.C., F.C.S.), they have received testimony from Sir CHARLES CAMERON, M.D., F.R.C.S.I., F.I.O., &c.; Professor T. E. Thorpe, F.R.S., F.I.C., F.C.S.; B. W. RICHARDSON, M.D., F.R.S.; A. B. GRIFFITHS, Ph.D., F.R.S.E., F.C.S.; R. H. HARLAND, F.I.C., F.C.S.; J. BAYNES, F.I.C., F.C.S.; T. PALMER, B. Sc., F.C.S.; and innumerable other Chemical and Medical Authorities; and have received the approval in use of most of the Medical Officers of Health in the United Kingdom.

Pamphlets, fully descriptive of all these manufactures, may be obtained free on application to

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LONDON, E.

C. T. KINGZETT, F.I.C., F.C.S.,

Author of "Animal Chemistry" (Longmans and Co.); "The Alkali Trade" (Longmans and Co.); and "Natures Hygiene" (Balliere and Co.); &c.
Managing Director and Chemist.

Food and Sanitation.

SATURDAY, JULY 1, 1893.

THE HON. HORACE PLUNKETT, M.P., AND THE ADULTERATION ACTS.

THE HON. HORACE PLUNKETT, M.P., is one of the very few members of the House of Commons who has taken a genuine and useful interest in matters affecting the well-being of English and Irish Agriculture, the suppression of fraud in food-stuffs, and the protection of the public from what is one of the most colossal swindles of the day: we refer to the sale of margarine and of butter mixtures well nigh everywhere throughout England, Ireland, Scotland and Wales, as pure butter. We are gratified, therefore, to see that at last a measure to repress these frauds has been introduced into Parliament by the Hon. Horace Plunkett, Mr. Barton, Mr. Arnold Foster and Mr. Butcher. We print it textually in our present issue, and, in the main, we recognise that it is a well-intentioned measure, but it is not one that will meet the case. Clause 11, for example, making the production of a warranty a good defence, is one that would

be fatal to the working of the Bill were it to become law. Nothing more perniciously protective of fraud has been introduced into adulteration legislation than the "warranty." It is not necessary for the protection of a single honest retailer, whilst it is utilised by hundreds of thieves to compete unfairly against the honest dealer and plunder the public. The majority of Food and Drugs Act Inspectors have had abundant evidence of this, and of the class of traders, milk vendors, butter blender users, etc., who swindle the consumer by means of the warranty dodge. It is because we fear that earnest reformers like Mr. Plunkett are unaware of the warranty swindle that we think it advisable to dwell upon the fraud done with impunity under the warranty cover. Wholesale butter mixture and margarine dealers, and farmers sending produce to London know perfectly well the class of trader who demands a warranty with every firkin or churn, and they also know perfectly well that the giving of such a warranty involves no risk whatever, for the all-sufficient reason that scarcely one Vestry, County Council, Board of Works, or local authority in the country will take the trouble or go to the expense of proceeding against the person giving such warranty. No further proof of the truth of this is necessary than the fact, that in our experience, as the one journal in the United Kingdom that has concerned itself with the evils of adulteration, we can only point to some three or four cases where the person giving the warranty has been proceeded against. The process of dragging a wholesale dealer into the courts over the case of sixpennyworth of butter, means the serving of a summons on a person often enough a hundred or more miles away, and in many instances actually outside the jurisdiction of our Courts. Local authorities, with the fear of rate-payers criticism, the uncertainty of the law, England's enemies at the Court of Queen's Bench ever ready to protect fraudulent traders, and the possibility of being dragged from Court to Court at a cost of some thousands of pounds, naturally enough prefer to let the warranty giver escape scot free. Our columns have shown many such cases, and they are notorious to all concerned with the working of the Acts. There is in these warranty cases a well understood arrangement between the unscrupulous retailer and his wholesale supplier. The one knows perfectly well that at the price he is paying the article cannot be genuine, and the wholesale vendor knows it also, but the warranty enables them to pose as honest men, and not only plunder the public, but undersell the honest retail grocer by cut-throat and "the best the world produces" trading. The retailer has his remedy without any warranty whatever in an action for damages against the wholesale dealer should he be fined for selling an adulterated article bought by him as genuine. Why, then, the warranty? The main reason alleged by persons who know nothing of the trade—of which Sir Charles Cameron, M.P., is a type—is, that the retailer is under the thumb of the wholesale dealer—owes him money, and dare not take action against him. A more untrue or insulting argument, as far as the retail grocers are concerned, it would be hard to advance.

It is seriously contended that "the best the world produces" colossal vendors of American lardy, innutritious provisions, as English and Irish produce, are under the thumb of the wholesale dealer? It is absurd to argue that they are—they are cut-throat thieving traders, disgracing an honourable calling, and robbing the public, whilst they bribe a venal press with huge advertisements to be silent about their swindling. The conscientious trader requires no warranty. The warranty leaves the brand of fraud upon him, and enables him to escape only a part of his punishment. That means loss of repute and of trade; and as the Courts give a remedy at law for that, it is the wiser and the manlier course that the grocer should not shield himself behind a miserable subterfuge, but aid in punishing the real offender. It is not the honest grocer who is prosecuted for adulteration. The fact that when,—despite pleas of having bought the article as genuine—magistrates convict, such grocers do not take action against the wholesale dealer, shows that the plea was untrue. Our columns have recorded one or two successful actions against wholesale dealers by retailers who have suffered by the fraudulent devices of wholesale dealers. That there are not more is significant as to the pernicious fraud-fostering character of the warranty. To assume that grocers dare not prosecute wholesale dealers is to insult and traduce them. It has long been a puzzle to us why colossal traders, co-operative societies and the like, of which the principal towns each have one, do not prosecute wholesale dealers in the case of what they find to be fraud on the part of the wholesale dealer, but they do not do so for the reason, as our own examinations have shown us that they themselves do not desire it, knowing full well it would but expose their rascality. That class of trader not only disgraces the honourable calling of grocers, but injures his country, and the warranty that exists solely to enable him to do so with impunity has had a too lengthened fraudulent innings. If Mr. Plunkett's Bill is to be of any use in checking fraud, the "warranty" must be abolished. Want of space compels us to reserve other objections to the Bill until our next issue.

MARGARINE ACT (1887) AND SALE OF FOOD AND DRUGS ACT (1875) AMENDMENT.

THE following Bill, brought in by Mr. Horace Plunkett, Mr. Barton, Mr. Arnold Foster, and Mr. Butcher, has just been printed:—

A Bill to Amend the Margarine Act (1887) and the Sale of Food and Drugs Act (1875).

Whereas it is expedient that the laws relating to the sale of margarine and the sale of food and drugs should be amended:

Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:—

1. This Act may be cited as the Margarine Act, 1887, and the Sale of Food and Drugs Act, 1875, Amended Act, 1893, and shall be construed as one with those Acts.

2. This Act shall come into operation on the first day of January, one thousand eight hundred and ninety-four, which day is hereinafter referred to as the commencement of this Act.

3. Sections four, five, six, seven, nine, ten, and eleven of the Margarine Act, 1887, shall be repealed on and after the commencement of this Act, except as to any conviction duly obtained, any penalty duly incurred, any registration duly effected, any proceeding commenced, any right acquired, or any other matter or thing duly done under the said sections respectively before the commencement of this Act.

4. On and after the commencement of this Act it shall not be lawful to colour margarine either by the introduction of any colouring substance or by any colouring process in its manufacture or in its preparation for sale, or to mix it with butter that is artificially coloured, and no substance sold as butter shall contain any other fat than butter fat.

5. On and after the commencement of this Act no margarine shall be manufactured or sold or kept for sale except in pursuance of a licence granted by the local authority; and all margarine manufactured or sold or kept for sale in contravention of this section shall be forfeited and destroyed or disposed of as the court may direct, and the occupier of the place in which it is so manufactured, sold, or kept shall be guilty of an offence under this Act.

6. Each local authority shall have power to grant licences under this Act in its own district, and such licences shall be valid if signed by two or more of the persons constituting the local authority, or if such licences are executed in any other way in which other licences, if any, granted by such authority are executed. Such licences may be granted for any time not exceeding one year, and may be subject to renewal in such manner as the local authority think necessary. There shall be charged in respect of each licence granted or renewed in pursuance of this Act the sum of ten shillings, which sum shall be paid to the local authority in the case of the grant of a new licence by the proposed licensee before the grant of the licence, and, in the case of the renewal of a licence by the person seeking such renewal, before such renewal.

7. Every person dealing in margarine, whether wholesale or retail, whether as a manufacturer, importer, or as consignor or consignee, or as commission agent or otherwise, and every person who keeps margarine for sale, shall have a notice affixed or painted in a prominent position to or on the manufactory, shop, house, or place in or on which margarine shall be so dealt in or kept as respectively aforesaid, setting forth that such person is "licensed to deal in margarine," and any person so dealing in or keeping margarine as aforesaid without having such notice affixed to or painted on such manufactory, shop, or place as aforesaid shall be guilty of an offence under this Act.

8. Every person who gives a false invoice of, or who in any way applies a false description to margarine, or who warrants either verbally or in writing that margarine is butter, shall be guilty of an offence under this Act.

9. Every person dealing in or keeping margarine as respectively described in section seven of this Act, who is found guilty of an offence under the Margarine Act, 1887, or under this Act, shall be liable on summary conviction for the first offence to a fine not exceeding twenty pounds; for the second offence to a fine not exceeding fifty pounds, and to a withdrawal for one year of his licence under this Act; and for the third offence to a fine not exceeding one hundred pounds, and the permanent withdrawal of the aforesaid licence, and a person convicted for such third offence shall not be entitled to obtain any fresh licence under this Act.

10. Every package, whether open or closed, containing margarine, shall be branded or durably marked "margarine" on the top, bottom, and sides in printed capital letters not less than one and a half inches square.

All margarine sold by retail shall be sold only in brick-shaped blocks of eight and sixteen ounces, avoirdupois weight; and each block shall be wrapped in paper upon which no other words or mark shall be printed or stamped except the name of the vendor or manufacturer, the trade mark (if any), and the word "margarine;" and the last word shall be printed in black letters, so as to be permanent and clearly legible, notwithstanding that the name of the vendor or manufacturer, and the trade mark (if any) shall be also printed or stamped on this paper.

Every person dealing in margarine in packages not so branded or durably marked as prescribed by this section, and every person selling margarine by retail otherwise than in accordance with the provisions in that behalf contained in this section, shall be respectively guilty of an offence under this Act.

11. Every person dealing in or keeping margarine for sale as respectively described in section 7 of this Act, or who sells, or exposes, or offers margarine for sale, or has it in his possession for the purposes of sale contrary to the provisions of the Margarine Act, 1887, or of this Act, shall be liable to conviction under that Act or under this Act (as the case may be), unless he shows to the satisfaction of the court before which he is charged that he purchased the article, in respect of which he is charged, as butter, and with a written warranty or invoice to that effect, that he had no reason to believe at the time when he sold it that the article was other than butter, and that he sold it in the state in which it was when he purchased it; and in such case he shall be discharged from the prosecution, but shall be liable to pay the costs incurred by the prosecutor unless he shall have given notice at the time when the sample for analysis was being taken that he would rely upon the above defence, and unless, if required to do so, he shall then have given the real name and real address of the person from whom he received such invoice or warranty.

12. In every case in which such notice of defence as in the last preceding section is mentioned shall be given, it shall be sufficient compliance with section fourteen of the Sale of Food and Drugs Act, 1875, for any officer authorised to take samples under that Act, or any deputy of such officer appointed as hereinafter provided, to send or deliver one of the three parts of the sample taken to the person who is alleged by the person charged to have given such invoice or warranty to or at the address given by the person so alleged to have given such invoice or warranty as aforesaid; and in every case in which a retail vendor of margarine proves that he sold margarine unwittingly and is discharged from the prosecution, the prosecutor may proceed against the person from whom such vendor alleges that he received the margarine, which is the subject of the prosecution, and upon such prosecution it shall not be a good defence for any wholesale dealer to prove that he bought the margarine unwittingly from a foreign dealer.

13. It shall be lawful for any Officer of Her Majesty's Customs or Inland Revenue, or any Officer authorised to take samples under the Sale of Food and Drugs Act, 1875, or any Deputy of such Officer appointed under this Act, to examine and take samples of any butter, or of any substance purporting to be butter, imported into and landed at any port in the United Kingdom, on and after the commencement of this Act, and to have such samples analysed by the Public Analyst of the district in which such samples were taken, and to receive from him a certificate of the result of his analysis; and if such certificate shall show that the butter, or substance purporting to be butter, is not butter as defined by the Margarine Act, 1887, such butter or other substance shall be forfeited and destroyed by the Commissioners of Her Majesty's Customs, or disposed of by them in such manner as they may direct.

14. On and after the commencement of this Act it shall be lawful for any officer authorised to take samples under the Sale of Food and Drugs Act, 1875, or any deputy of such officer to be appointed under this Act, without going through the form of purchase prescribed by that Act, but otherwise acting in all respects in accordance with the provisions of that Act, to take samples for the purpose of analysis of any butter, or substances purporting to be butter, which are exposed or are on sale by retail, or are deposited in any place for the purpose of sale, or are in course of delivery to any purchaser or consignee in pursuance of any contract for the sale thereof, and are not marked margarine as provided by this Act; and any such substance not being so marked shall be presumed to be dealt in contrary to this Act, and the person dealing in it shall be guilty of an offence under this Act. The proof that any such substance was not exposed for sale or was not on sale by retail or was not deposited or conveyed or in course of delivery for the purpose of being dealt in contrary to this Act, shall rest with the party charged with dealing with such substance contrary to this Act.

15. On and after the commencement of this Act any person or association of persons shall be entitled under the conditions prescribed by the Sale of Food and Drugs Act, 1875, as to the purchase of samples for analysis, but without going through the form of purchase prescribed by that Act, to submit any substance which has been sold to any person or persons whomsoever as butter by any of the dealers mentioned in section seven of this Act, to be analysed by the analyst appointed under the provisions of that Act for the district in which such sale took place, and to receive from such analyst a certificate of the result of his analysis; and if such certificate shall show that the substance so sold as butter was in fact not butter, but margarine, it shall be the duty of the local authority for the aforesaid district to prosecute the dealer who sold the said substance for an offence under this Act.

16. The Local Government Board shall appoint and remunerate out of moneys to be provided by Parliament upon such scale as to such Board shall seem right any number, not exceeding six, of special travelling Inspectors for the purpose of organising systematic inspection under this Act, and of instructing the officers empowered by the Margarine Act, 1887, to carry out the provisions of that Act.

17. It shall be lawful for such travelling Inspectors and such officers as aforesaid, and the deputies of such officers to be appointed under this Act, to inspect and take samples of butter and of substances which purport or are represented to be butter in any manufactory, warehouse, shop, store, hotel, restaurant, or eating-house in which butter or such substance as aforesaid is made or sold or offered or kept for the purpose of sale.

18. On and after the commencement of this Act, it shall be lawful for any officer authorised to take samples under the Sale of Food and Drugs Act, 1875, to appoint, in writing, a deputy to take samples on his behalf, and sections thirteen and seventeen of the said Act

shall on and after the aforesaid date be read and construed as if any such deputy were included therein respectively in addition to the officer, Inspector, or constable therein respectively named.

19. One-third of any penalty recovered under this Act shall be paid to the person who proceeds for the same in addition to his legal costs of obtaining the analysis, and any other reasonable expenses to which the Court shall consider him entitled.

Mr. H. Plunkett will move that the Bill for amending the Margarine Act and the Food and Drugs Act be referred to a Select Committee.

ADULTERATION PROSECUTIONS.

VINEGAR.

At Huddersfield Police-court, on the 20th ult., Charles Broadhead, grocer, Milnsbridge, was summoned for selling adulterated vinegar, on the 5th May. Mr. Hiley, from the office of the West Riding Solicitors at Wakefield, appeared for the prosecution. Inspector Bridge stated that he bought a sample of vinegar from the defendant at his shop, for the purpose of analysis. He submitted it to the Public Analyst, and his report stated that the sample was free from poisonous metals and mineral acids. It consisted chiefly of a factitious product composed of dilute acetic acid (probably obtained by the distillation of wood) coloured and flavoured to imitate vinegar. The sample contained little of any true vinegar, by which is to be understood an acid liquid resulting from the acetic fermentation of alcoholic or saccharine liquids such as wine, cider, malt wort, sugar syrup, &c. The sample bore the same relation to real vinegar, that margarine bore to butter. Defendant said he sold as he received it from the manufacturers, Messrs. Stothard & Co., of Blackburn, but the Bench fined him 10s. and 19s. 6d. costs.

At Swindon Petty Sessions, on June 22nd, Luther Silverthorne, refreshment house keeper, of Regent-street, New Swindon, was summoned for selling vinegar not of the nature, substance, and quality demanded. Mr. H. Bevir prosecuted on behalf of the Wilts County Council. James William Ward, son of the Inspector of Weights and Measures for North Wilts, spoke to asking for best vinegar, and he was supplied by a person behind the bar. The Inspector said he followed his son into the shop, and, having told the assistant he intended to have the vinegar analysed, divided it into three parts, keeping one himself, leaving another at the shop, and sending a third to the Public Analyst (Mr. Gatehouse). The report of the Analyst showed that the mixture consisted of burnt sugar and acetic acid diluted with 97.15 per cent. of water; it bore no trace of true vinegar, of which it was only a colourable imitation. Defendant had written to him saying that he had acted in ignorance, and sold the vinegar as he bought it from a Birmingham firm; he would be careful to guard against a repetition of the offence. Fined 40s. and £1 2s. 6d. costs.

At Doncaster Borough Court, on June 26th, Charles Hough, grocer, St. Sepulchre-gate, was summoned under the Food and Drugs Act (section 6), for selling a pint of vinegar to the prejudice of the purchaser, which was not of the substance, nature, and quality of the article demanded. Mr. T. B. Sugden, Town Clerk, prosecuted, and Mr. A. Neal, Sheffield, defended the case on behalf of the Sheffield Vinegar Company. Inspector Thompson proved that he purchased a pint of vinegar from defendant for 2d., and when told what it was for, defendant said, "I expect it's all right. I bought it for malt vinegar." The vinegar was divided into three parts. Mr. A. H. Allen, Public Analyst, for Doncaster, having been required by the defence to attend for cross-examination, produced his certificate, which stated that the sample was free from poisonous metals and mineral acids. It consisted chiefly of a factitious product composed of dilute acetic (probably obtained by the distillation of wood), coloured and flavoured to imitate vinegar. The sample did not contain more than 12 per cent. of true vinegar, by which was to be understood an acid liquid resulting from the acetous fermentation of alcoholic or saccharine liquids, such as wine, cider, malt-worts, sugar syrup, etc. The sample bore the same relation to real vinegar that margarine did to butter." In examination, Mr. Allen said if he had to give the certificate now he would leave out the word "probably." The sample contained a large quantity of acetic acid derived from wood, and he considered the part derived from wood was factitious. The acetic acid had the appearance of water and was colourless, the colouring being given by burnt sugar. The sample did not contain the ingredients that vinegar obtained from malt contained, and was partially destitute of the aroma and flavour of vinegar. The sample contained only a minimum of vinegar. By Mr. Neal: It is not genuine vinegar. It might be called factitious vinegar or "concocted vinegar," but he did not think the public would buy it under such a name. It was "vinegar" with an adjective in front of it. Mr. Neal said he should contend that 2 cwt. of malt and 1 cwt. of molasses were used in the making of 1,000 gallons of that "factitious" product, and that there was also 125 gallons of what was commonly known as wood vinegar, and he asked Mr. Allen if his analysis would contradict that. Mr. Allen: It rather confirms my analysis. For the defence, Mr. Neal said that the manufacturer for whom he appeared claimed that they were entitled to sell the vinegar as a wholesome article. It was obtained by fermentation of malt and molasses. He read a definition of vinegar as contained in the Imperial Dictionary, and said the article sold came within that definition, which described vinegar as "dilute and impure acetic acid, obtained by the vinous fermentation." The Chairman (Mr. R. E. Clark) said the Bench were unanimously of opinion that there must be a conviction, but they did not regard it as a serious case, and a nominal penalty of 10s. and costs would be imposed. The costs amounted to £3 7s. Mr. Neal gave notice of appeal at the Quarter Sessions—two sureties of £25 each being found to ensure the appeal being carried on.

LIMERICK AND MILK ANALYSIS.

WHAT ABOUT PROSECUTIONS?

The *Cork Herald* says:—The following analysis of milk samples has been received by the High Constable, Mr. James Forrest:—Catherine Sullivan, Nicholas-street, slightly below average; Mary Ryan, Nicholas-street, do.; Jane Hogan, Arthur's Quay, poor; James Dwyer, 33, Mary-street, slightly below average; Catherine Carmody, 63, Mary-street, very poor; Bridget Hannon, Donoughmore, do.; Mary Hogan, Cornwallis-street, adulterated; Mary Collins, Ballinantly, slightly below average.

THE LEWISHAM UNION BOARD OF GUARDIANS AND MILK.

In consequence of a complaint of the Public Analyst as to milk supplied to the house, it was decided to request the Local Government Board to determine the contract.

A WEST BROMWICH MILK-SELLING CASE.

IMPORTANT APPEAL.

On the 20th ult., the adjourned Quarter Session for the Borough of West Bromwich were held, for the purpose of hearing judgment in an appeal case. The Recorder (Mr. R. C. E. Plumptre) was accompanied upon the Bench by the Mayor (Councillor Akkrill). The appeal was by James Holt, wholesale milk dealer, of Birmingham, against a decision of the Borough Magistrates on March 30 last, convicting him under the Food and Drugs Act of selling milk adulterated with 8 per cent. of water. Mr. Kettle (instructed by Mr. Walker) appeared for the respondents, and Mr. Lawrence was for the appellant. One question raised was whether Holt was the proper person to summon, the milk having been sent direct from Oakengates to a customer of Holt at West Bromwich, named Thomas Greening, without Holt having seen it. Another point was as to whether a deputy of the Inspector could take a sample of milk for analysis without the owner of the milk being present. The Recorder reviewed the evidence at considerable length, and held that the deputy could not take a sample of milk without showing that he was acting under the Local Authority, and the Inspector should be present when the sample was taken. The appeal was allowed with costs. Mr. Kettle asked for a case to appeal to the Superior Courts, which was granted.

BORIC ACID IN MILK.

At the last meeting of Lewisham Board of Works, the Analyst reported that he had examined four samples of milk taken in the hamlet of Penge, three of which were certified as genuine, while the fourth was reported as a mixture of milk and boric acid. It was decided that a summons should be issued against the vendor of the last sample referred to, provided that the officers of the Board came to the conclusion that there was sufficient evidence to justify a prosecution.

IMPORTANT POINT FOR MILK VENDORS.

In the Sheriff Small-Debt Court, Paisley, on the 15th ult., Sheriff Cowan heard parties in an action at the instance of Robert Russell, farmer, Auchentobar, Neilston, against Mrs. Jessie Reid or Tennant, dairykeeper, Barrhead, in which he sued for £5 3s. 10d. for milk supplied to defender during the current year. Defender admitted the account, but maintained that she was entitled to set off against it the amount of fine paid by her and the expenses in connection with a prosecution raised by the Inspector under the Food and Drugs Act against her for having on the 24th March last sold adulterated milk, she having been convicted of the same. Evidence was led to show that for some time past the pursuer had supplied the defender with milk of an inferior quality, and that repeated complaints were made to him without effect, and that on the 24th March last the milk for the sale of which she was convicted was sold by her in the very same state as she received it from the pursuer. The Sheriff, in giving judgment, held that the conviction against the defender on 16th March was perfectly right, as undoubtedly the milk sold by her was very much adulterated with water. He also held that it was very clearly proved that the said milk was supplied by the pursuer, and was sold by the defender in the same state as she had received it, and that she had not adulterated it in any way. He held she was entitled to recover from Russell the fine and the expense she was put to in connection with the prosecution, including expenses incurred to her agent in defending. Accordingly he held that the whole expenses thus incurred by her, including the expenses of the present action, amounted to the same sum as was sued for, and assuaged defender. Mr. T. Gow Smith, writer, Paisley, acted for defender.

IMPORTANT QUESTION AS TO THE FORM OF SUMMONS.

On June 14th, at Skipton Police-court, Enoch Stevenson, milk dealer, Cowling, was summoned for selling adulterated milk. Mr. Randerson, the local inspector under the Food and Drugs Act, prosecuted. Mr. W. A. Robinson, who appeared on behalf of the defendant, prior to any evidence being tendered, contended that as the particulars of the offence with which the seller was accused were not stated on the summons, the case could not be heard that day. By Section 10 of the Act it was necessary that the summons should contain the particulars of the alleged defect in the milk, or state in what manner the milk had been adulterated. Such non-compliance with the Act was fatal to the summons. Mr. Robinson, in support of his argument, quoted the case of Barnes v. Ryder, which was heard in the Queen's Bench Division on October 27th, 1892, and reported in the "Law Times Reports." That decided the question under exactly similar circumstances. Mr. Randerson said he had had several cases before under exactly similar circumstances, and that was the first time the summons had been objected to. The case was withdrawn, but another summons has been issued.

CONDENSED MILK.

At Pontypridd Police-court, on June 21st, Superintendent Evan Jones, Inspector under the Glamorganshire County Council, summoned Catherine Thomas, grocer, Porth, on a charge of selling condensed milk from which all the cream had been abstracted, and to which had been added 33 per cent. of cane sugar. Mr. W. E. R. Allen (Deputy Clerk for the County Council) prosecuted. The sample was taken by the Inspector to the Public Analyst, from whom the following certificate was received:—"I am of opinion that this sample (109 D) contains only a trace of butter, and is composed of skimmed milk, with 33 per cent. of cane sugar. No change or alteration has taken place in this sample so as to affect the analysis." Mr. Allen: This case is quite different from the case which went to the High Court. The summons reads:—"Having in your possession a certain article of food, called and known as condensed milk, to which a quantity of cane sugar has been added and sold, the same so altered without making a disclosure." Mr. Allen, proceeding with his address, said that the summons was served personally on the defendant, and the label on the tin which he now could read, but of which he knew nothing until it was returned from the Analyst. "Household Brand of Condensed Milk. Guaranteed absolutely pure. Prepared in Saxony." Then follows directions for opening it and for using it, such as "add four or five parts of water to every part of this condensed milk. For children eight to thirteen parts according to age. Keep the open tin in a cool place. Only a portion of the cream has been removed, and to which nothing but the best sugar has been added." The Stipendiary: I don't think a disclosure of the alteration has been made when the label says that a portion of the cream has been removed, for that points directly to the fact that a considerable portion has been left. Then in the directions it says that it is suitable food for infants, while I would say, after reading that analysis, that it would be very indigestible stuff and unfit for children's food. Mr. Allen: No label would be a protection if it were adulterated. The Stipendiary: The disclosure ought to be a full disclosure, and not a partial one as in this case. Mr. Allen: I contend that no label is a disclosure under Section 9. The Stipendiary: We have had that question settled. If you do not agree with it you must appeal somewhere else. The Court has decided it, and that is enough for us. Mr. Allen: I consider no label a disclosure, and certainly not this one. This cannot be a disclosure, because it was covered by a piece of white plain paper. Even supposing this wrapper to have been a disclosure, it was never seen by the purchaser until it came back from the Analyst, and, therefore, the fact of the abstraction of nearly all the cream was never disclosed to the purchaser. Dr. William Williams, D.P.H., Cambridge, and Medical Officer for the County of Glamorgan, said that the percentage of cream in good whole milk would be about 4 per cent., and in good condensed milk 10 per cent. The Stipendiary: We do not want a doctor to tell us that. Dr. Williams said that milk from which the cream had been abstracted would be very injurious if used as food for infants, and would be even more so in condensed milk, for about six parts of water would have to be added. Mr. Allen pointed out to his worship that he strongly disagreed with the holding that a label was a disclosure: but even admitting that no disclosure had been made in this case, for the article had been wrapped up in plain paper and given to the purchaser, this label might as well have been in the tin with the milk. He must ask his worship to convict in this case, although he felt sorry that the defendant was not represented by a councillor or solicitor, and from the fact that the milk had been prepared in Saxony he feared that there would be no manufacturers behind the scenes. The Stipendiary remarked that this was quite a different case from any other heard at that court, for here an intimation that part of the cream had been abstracted, whereas, as a matter of fact, the whole had been abstracted. This was not a disclosure within the meaning of the Act, and even if the wrapper contained such an intimation the tin was wrapped in a plain paper, and the purchaser did not know what it really contained. This being the first offence, the defendant was only fined 1s. and costs. An application for the cost of shorthand notes was refused.

MORE CONDENSED SKIM MILK CONDEMNATIONS.

Dr. E. W. Hope, the Assistant Medical Officer of Liverpool, says, "The public should be on their guard in the purchase of condensed milk. Several brands consist of genuine condensed milk, and the addition of water will reduce it to the strength of ordinary new milk, but other brands are made from milk from which all the cream has been abstracted, and the use of such preparations as the sole food for infants would be seriously prejudicial to their health. Certain samples of cheese were found to be manufactured from milk from which all the cream had been previously abstracted, and its place supplied by grease of various kinds. A practice exists among many grocers of wrapping every article which they sell in a wrapper marked in small type 'This is sold as a mixture.' Those who desire genuine and unadulterated articles would do well to decline to accept articles wrapped in the manner indicated, since it is doubtful whether, under the Sale of Food and Drugs Act, the purchaser would have any redress even though a pure and unadulterated article were demanded and paid for." This information must be useful to all those who have the management of households.

ANALYST'S REPORT.

The report of the Analyst for the Worcestershire County Council, said that he had examined 51 samples from the County, of which four were adulterated; and 17 from Dudley, of which one was adulterated.

MILK.

At Armagh Petty Sessions, on June 22nd, James Mawhorter was charged by Sergeant Hamilton with selling milk adulterated with water. Professor Hodges' certificate was produced, shewing that the milk was adulterated with $8\frac{1}{2}$ per cent. of water over the 15 per cent. allowed for churning. Defendant said he knew nothing about it. It was market evening, and it might be that a drop of water was spilled into it. Defendant's wife stated that she had the name of selling good milk. She purchased the milk from Mr. Hamilton, and she had no means of knowing that it was not pure milk. Plaintiff said that it was held in the superior courts that ignorance was no defence. A fine of 5s. and 12s. costs was imposed.

At the District Petty Sessions, Enniskillen, Sergeant Sheridan charged Mrs. Adelaide Hinchey, Orchard-terrace, with selling adulterated buttermilk in the police barrack on the 19th May. Sir Charles Cameron's certificate stated that the milk contained 40 per cent. of water, exclusive of the 25 per cent. allowed for churning purposes. There was a similar charge by same complainant against James Johnston, Down-street, for selling milk which, according to the certificate of Sir Charles Cameron, contained 15 per cent. of water, exclusive of the 25 per cent. allowed for churning purposes. Sergeant Sheridan said the defendant in the former case refused to tell him from whom she got the milk, but afterwards did, and he immediately proceeded to Mr. Johnston's house and purchased a quantity of same buttermilk which was in the churn and sent it for analysis. Mrs. Hinchey was fined £1 and costs, and Mr. Johnston £2 and costs.

At the Aston Police-court on the 21st ult., Jane Evans, shop-keeper, 15, Barton's Bank, Aston, and John William Pearson, 49, Whitehead-road, Aston, were each summoned at the instance of Mr. Benjamin Bolt, Inspector under the Food and Drugs Act, for selling milk deficient of 30 per cent. of cream. Pearson was fined 20s. and costs, while the case against Evans was dismissed upon the payment of costs, it being explained that the milk was 36 hours old, and was taken from a quart that remained of five gallons. Other samples of milk supplied later were found to be pure.

WORKHOUSE MILK.

At Dublin Police-court, on the 16th ult., James Cullen, 36, North King-street, was prosecuted by the Guardians of the South Dublin Union for supplying to the Union milk adulterated with six per cent. of added water. Mr. MacSheehy prosecuted on behalf of the Public Health Department of the Corporation. Mr. J. E. S. Condon, LL.D. (instructed by Mr. Gerald Byrne), appeared for the defendant. The Master of the Union, Mr. Alexander Fraser, produced the defendant's contract, which was to supply sixty gallons of pure milk per day. On May 22nd he took a sample of the milk delivered by the defendant's man, and divided it into three parts, and forwarded one to Sir Charles Cameron. The milk was being poured into the Union churn. There was no milk or anything else in the churn before the milk was poured in. Witness next day delivered the sample to Sir Charles Cameron, and got the certificate by post. Sir Charles Cameron was examined by Mr. Condon about the quality of milk in exceedingly dry weather like the present. Sir Charles said he had found extremely rich milk within the last month or so. Mr. Condon said that the adulteration was extremely small, and he did not think a prosecution was justified. Mr. Fraser was recalled, and said that the defendant had been two years contractor to the Union, and had been fined on a previous occasion. A fine of £3 was imposed.

At Hampstead Petty Sessions, William Jenkins, Dorinda-street, Barnsbury, a milk-carrier in the employ of Laycock's Dairy Company, was fined £5 and costs for having sold milk adulterated with 5 per cent. of added water.

At Ystrad, on the 19th ult., Francis Hicks, Treherbert, was fined £1 16s. for selling milk adulterated with 20 per cent. of water.—James Beak, Tonypany, was also fined £1 11s. 6d. for a similar offence. Inspector Jones prosecuted.

At Lewes Petty Session, James Andrews, of Ditchling, was summoned, at the instance of the County Council, for selling a pint of milk not of the nature, substance, and quality required by the Act.—Mr. H. Moore, Inspector of Weights and Measures, appeared for the County Council, and Mr. Kerridge, of Brighton, for the defendant.—William Blaber, assistant to Mr. Moore, said that on the 29th May he went to the defendant's premises and asked for a pint of new milk. Defendant's wife served him, and he gave 2d. for the milk. Mrs. Andrews was informed that it was to be analysed by the County Analyst, and she said it was rather unusual to take it from the pan.—Cross-examined: Mr. Moore, who was present, offered to divide the milk into three parts.—Henry Moore said on the 29th May he was in the defendant's dairy. While there, his assistant came in and asked for a pint of milk, which was served to him by Mrs. Andrews. When the purchase was completed, witness told Mrs. Andrews the milk was to be analysed by the Public Analyst, and offered to divide it into three parts. He did so, one part he forwarded to the Analyst, whose certificate (produced) was to the effect that it was deficient in butter fat to the extent of 25 per cent., due to the extraction of cream. He saw Mrs. Andrews serve the milk. She blew the cream on one side and dipped a small measure into the fluid.—Cross-examined: He did not suggest that the cream was taken away. He did not think it was his duty to point out the effect of the cream being blown on one side. Mr. Kerridge submitted at first that the form of summons had not been properly made out.—The Magistrate's Clerk (Mr. A. F. Drake) replied, if necessary the summons could be amended.—Mr. Kerridge said he had also an answer to the case on the facts. The Inspector should have

taken a sample fairly from the pan. The milk was new milk. Mr. Andrews had carried on business for many years and had never been before the Bench previously. Mr. Moore had been frequently to his premises, and had never found any cause for complaint. The milk was sold as new milk, and there was no intention of committing any offence. Mrs. Andrews said that the farm was a dairy farm, and that cows were kept on it. The milk served to Mr. Moore came from the cows the same morning, and nothing had been done to it. The milk was put into the pans for the purposes of creaming. She never sold skim milk.—Cross-examined: She felt positive that she did not blow the cream on one side when she served the milk, but she would not swear that she did not.—In answer to Mr. Blencowe, witness admitted that if she blew the cream on one side it would diminish the value of the milk served.—Further questioned, witness said that after Mr. Moore told her the milk was to be analysed, she remarked that it was rather unusual to take it from the pans.—James Merritt, cowman in the employ of the defendant, said he milked the cows on the day in question and put a gallon in the crock for the "missus" to serve out. He took nothing from the milk nor added anything to it.—James Andrews said he had been in the dairy business for forty-one years. He had nothing to do with the milk on this occasion. No one had access to it but Mrs. Andrews and Merritt.—Mr. E. J. Adames, a solicitor in Court at the time, handed the Magistrates a copy of "Law Journal reports," containing the report of a case, *Barnes v. Ryder*, bearing on the question as to the wording of the summons.—On returning into Court, after retiring to consider their decision, the Chairman said the Bench were much indebted to Mr. Adames for having introduced the case of *Barnes v. Ryder* to their notice, and they felt that the case before them should be dismissed. Mr. Kerridge asked that costs should be allowed. The Chairman: Oh, no we never do that. Be satisfied with the result.

IMPORTANT POINT IN MILK ADULTERATION.

At Birmingham Police Court on the 18th ult., Joseph Howard Shaw, West Heath, Northfield, was summoned for selling a half-pint of milk containing 9 per cent. of added water and 90 per cent. only of the fat natural to it. Mr. Bell (from the office of the Town Clerk) appeared for the prosecution, and Mr. Hassall for the defendant.—The analysis of the milk by Dr. Hill was handed in, and admitted on behalf of the defendant as to its accuracy. Mr. Hassall, however, raised an objection to the document on the ground that it did not give the standard by which defendant could judge as to quality of his milk. The point was now the subject of an appeal in another case, and he suggested that the present summons should be adjourned pending the decision in that appeal.—The Magistrates retired; and on their return announced that, as the point was an important one, and their previous decision was under revision, they thought that the interests of all parties were best served by adjourning this and other similar cases *sine die*. The Magistrates trusted that the appeal would be pushed forward as quickly as possible.

WATER IN BUTTER.

At the last Kilrush Petty Sessions (before Counsellor Brew, presiding; Mr. John Culligan, and Mr. B. Cox), Acting Sergeant Kane, the Local Inspector under the Food and Drugs Act, prosecuted Thomas Reidy, a farmer residing at Ballinagun. Mr. Hilliard, Solicitor, appeared for the defendant. By the evidence it was shown the Inspector attended the weekly butter market on the 19th of April, and demanded 1 lb. of butter out of a firkin which defendant's wife was offering for sale. He tendered her 1s., and after much persuasion she consented, and having taken the sample he divided it into three portions, one of which he gave to Mrs. Reidy, another he retained himself, and the third he sent for analysis to Charles Cameron. The result of the analysis was that the butter was adulterated with an excessive quantity of water, some 20 per cent. or one-third of its total weight. Mrs. Reidy was examined, and stated she had been making butter for 23 years, and on this occasion had only added the quantity of water absolutely required. Mr. Hilliard, for the defence, raised several points which, he argued, were fatal to the success of the prosecution. The defendant was not properly before the court, and, secondly, he impugned the validity of the Inspector's appointment, which was made subsequent to the discharge of the Grand Jury. To have been legally appointed it was necessary that the Grand Jurors should have elected him to the office while discharging their functions. On the merits of the case, he submitted no fraud or deceit had been disclosed in the Inspector's statement. He had not demanded butter from Mrs. Reidy free from all water, he simply asked for 1 lb., and was supplied with that quantity. There should be something in the nature of the demand to warrant them in holding that the Inspector had been supplied with a spurious article. Chairman: Is 20 per cent. of water too much? Mr. Hilliard: The question is how much water is necessary as an ingredient to the making of butter? Mr. Culligan: It has been stated over and over again that 15 per cent. is the limit. Mr. Hilliard: You have in evidence that in two other cases where there was a quantity of water found in excess of 15 per cent., Dr. Cameron would not advise a prosecution. Then, in this particular case, you have only what I might call five per cent. of illegal water. Will you go so far as to say that that quantity is sufficient to constitute a fraud? District Inspector Rolleston said if the sample had been taken from the edge of the firkin, the probability was that more water would have been found. Counsellor Brew said he would be inclined to decide against Mr. Hilliard on the first point raised, as he believed Mrs. Reidy was clearly acting as her husband's agent on this occasion. But as the case was one of some importance to the outside public as well as to the parties interested, they would withhold their decision for a fortnight, so as to have an opportunity of fully considering the other points raised by Mr. Hilliard.

BUTTER.

At Salisbury Police Court, on the 19th June, Samuel Robert Naish, baker and grocer, of Church Street, was summoned by Supt. Mathews (Inspector under the Food and Drugs Act) for having sold, on May 23, a quantity of butter not of the nature, quality and substance demanded.—Mr. Nodder, for the defence, pleaded guilty.—P.C. Thomas said he went to defendant's shop on May 23rd. He asked for a pound of butter. Defendant said he did not think he had any, but on looking said he had a pound and handed it to witness, who gave him 1s. for it. Just then the Superintendent came in and witness gave the butter to him, the Superintendent saying he was going to submit it to the Public Analyst. Defendant said, "You remember, sir, that I told the constable I had no butter left."—By Mr. Nodder: Defendant went round to the back of the shop for the butter he sold to witness.—Supt. Mathews said, having sent the last witness to defendant's shop for butter, he entered the shop just as Mr. Naish was giving the butter to the constable. Witness took the butter, divided it into three parts, gave one to Mr. Naish, and sealed the samples. Defendant said to him, "Haden't I better get this analysed?" Witness said he could wait until he knew whether there was anything the matter with the butter. Defendant said to him, "I just told your man that was all the butter I had." Witness had sent a sample of the butter to the Analyst, who had certified that it was not butter but margarine.—Mr. Nodder, in opening the case for the defence, said there was one thing he must bring to the notice of the Bench, which would prove fatal to the case, and that was that the Public Analyst's certificate was not in the form set out by the Act of Parliament. That was apart from the merits of the case, which he would deal with later if necessary. The Bench, after considering the objection, said they would hear the case, and Mr. Nodder then addressed the Court on the merits. He said his client, happening to be out of butter that morning, sent for this to another tradesman, and did not know that it was not butter. He distinctly told the constable he had no salt butter, and then asked him whether he would have some of this (pointing to what proved to be margarine), and did not call it butter. Defendant, called by Mr. Nodder, said when the constable asked for salt butter, witness distinctly told him that he had no salt butter in the place, but would have some shortly if the constable could wait. The policeman said he could not wait, and defendant thereupon went round to the back, and showing him the butter in question, said, "Will you have some of this?" The constable said "Yes," and the butter was weighed. William Haskell, coachman to Mr. C. H. Radcliffe, corroborated the evidence of the last witness, saying he was sure the defendant did not use the word butter when speaking of the article in question.—Questioned by the Chairman, defendant said the stuff he sold the constable was at the back part of the shop, and not where he kept his butter.—The Bench retired to consider their decision, and, after an absence of a few minutes, the Chairman said they did not see their way out of a conviction. The Act had been broken, and though they did not think it a bad case, and though the fine would not be heavy, they felt bound to convict. The fine would be £2 inclusive of costs.—Mr. Nodder said his client would consider whether he would ask the Bench to state a case for a higher court, and the Chairman said, of course they would allow an appeal if Mr. Naish thought fit. He added that having known Mr. Naish for a number of years as a tradesman, he should like to say that he did not think for one moment that he intentionally committed the offence.

At Leeds, on the 13th ult., Michael Maloney, Irish butter importer, 26, Lady-lane, Leeds, was charged before Mr. Bruce with exposing for sale by retail a quantity of margarine, which had not the required label attached to it. He was further charged with refusing to sell Mr. Walker, Food and Drugs Inspector, a pound of butter, contrary to Section 17 of the Food and Drugs Act, 1875. Mr. C. C. Jolliffe (Deputy Town Clerk) prosecuted, and Mr. Granger defended. Mr. Walker stated that on the 13th ult. he visited the defendant's shop, and saw several lumps of butter on shelves. He inquired as to their quality. The defendant said two were butter, but he did not know what a third was. He refused to sell witness any, saying it was not for sale. Witness thereupon cut off about a pound, and sent it to Mr. Fairley, the City Analyst. That gentleman had certified it to contain at least 90 per cent. of fat other than butter fat. The defence was that a firm of shippers had sent the butter in question, but that it was not the kind ordered, and had been put on one side, and none of it had been sold. Mr. Bruce dismissed both summonses.

MARGARINE.

At Bradford on the 20th June, Joseph Shaw, of 5, Grey-street, Bowling Back-lane, was summoned for selling margarine as fresh butter. Mr. W. C. Rhodes, the Food Inspector under the Corporation, stated that on the 1st ult. a girl bought a quantity of margarine at a shop where he happened to be. He followed her and watched the house in Grey-street which she had entered. A boy then came out with something nicely covered up in a basket. The witness asked him what he was selling, and he answered, "Fresh farmer's butter." The witness asked for a pound, but the boy said he could not spare so much as he was taking it to a shopkeeper. The witness, however, bought a pound for 1s. The original price of the margarine was 5½d. per lb. The butter bore the defendant's impress, and on the house being searched three prints were found similar to that which the witness had bought. The Defendant said he called the prints margarine, and that the material was sent out as such. The Stipendiary Magistrate dismissed the summons on the ground that it had been taken out against the wrong person. The real offender was the lad who was found in possession of the article.

Mr. Edward Jones, grocer, Navigation, and Ynysybwl, was charged at Pontypridd, on June 21st, with selling margarine without using a label or paper in which to wrap it up and supply it to the public. Defendant said he sold the stuff as margarine for making cake, and only received 9d. per lb. for it. Mr. Phillips, who defended, contended that the stuff was proper butter, but that the defendant was too confused at the time to tell the Superintendent so. He was fined £1 and costs. The same defendant was indicted for using weights which were too light, and was mulcted in a fourth sum of £1.

At the Sheffield Police Court, on the 23rd ult., before Mr. Skelton Cole and Mr. George Barnsley, a provision dealer in Westbar was charged with selling to the Sanitary Inspector a quantity of margarine on May 16th without wrapping it in a paper duly labelled with the word "Margarine." Defendant summoned his assistant, Tom Holt, proving that he was responsible for the offence. Mr. A. M. Wilson appeared for Holt, and pointed out that the offence was committed inadvertently, he being in a hurry at the time. The defendant was fined 20s. and costs, and the Bench allowed the summons against his employer to be withdrawn on the payment of the costs, 8s. 6d.—Frederick William Taylor, provision merchant, 62, Meadow-street, was summoned for exposing for sale in his shop on May 5 a quantity of margarine which was not properly marked, and with selling a pound of it without wrapping it in a paper duly marked. Mr. A. Neal urged that the defendant had just cleaned his shop, and that everything was out of place, causing him to be unable to find the proper paper. The Bench inflicted a fine of 10s. and costs in each case.—Mr. Sayer, Deputy Town Clerk, prosecuted.

At Dublin, on the 16th ult., Joseph Kenny, Thomas-street, was fined £10 for exposing margarine for sale without a label.

CHEESE.

Mr. W. Rowlands, grocer, of Cilfynydd, near Pontypridd, was brought up on remand on June 21st, to answer a charge of selling cheese which had been adulterated with water. The Stipendiary asked Superintendent Jones if he had any ground to think that the man had soaked the cheese in water. Superintendent Jones: No, sir; I believe he sold it as he bought it. The Stipendiary: Have you any grounds to say that the cheese has been adulterated? Superintendent Jones: I must say that there has been negligence on the part of the maker. It was cheese with a larger amount of water than there should be. The evidence given at the previous hearing was then read by the Clerk, which stated that the cheese contained 20 per cent. of water in excess of what it ought to contain. Defendant: My wife bought two cheeses in the market. We ate one and sold the other. The Stipendiary: Yes, but the public are entitled to be supplied with unadulterated cheese. If the water was introduced in the process of manufacture, or if the cheese was insufficiently squeezed, then it amounts to adulteration. Superintendent Jones: I think it is negligence in the manufacture, because the water was not squeezed so that the cheese might weigh more. It is a new kind of fraud, and is in this district extensively used in the manufacture of butter. I notice that convictions have been reported for selling butter adulterated with water. The Stipendiary: We had better let this case drop, inasmuch as it is not very clear, and especially when we take into consideration that this poor man has been dragged before the Court three or four times. The case was therefore dismissed.

COFFEE.

At Pontypridd Police-court, on June 21st, John Lewis, grocer, Llantrissant, was charged with selling adulterated coffee. Superintendent Evan Jones, an Inspector under the Glamorganshire County Council, said that on May 26th he went into defendant's shop and asked for a quarter-pound of coffee. Defendant supplied it in a tin, for which he paid 4d. He offered to divide it into three parts, but the offer was not accepted. The Superintendent then forwarded the sample to the Public Analyst, and received a certificate on June 14th, which stated that it contained 60 per cent. of coffee and 40 per cent. of chicory. There was no intimation given that the coffee was mixed with chicory. Defendant: I have a label here, sir, which is similar to the one on the tin. The Stipendiary then took the label and read—"This excellent coffee is made of the very best ground coffee mixed with the finest chicory, and sold as a mixture of coffee and chicory." Sergeant John Hallett deposed that he was with Superintendent Jones when he made the purchase, and that he served the summons on the accused; when he did so, the defendant told him, "I made a mistake in giving the Superintendent the tin, for it contained coffee and chicory, and I had almost a mind to call him back to tell him so, but I suppose it would have been the same." The defendant at the time gave the Superintendent no intimation that the packet contained chicory, and the witness said he heard Superintendent Jones ask for coffee. The Stipendiary: This is not like a skimmed milk case, and it is not like Colman's mustard, where something is added to make it an article of commerce. Superintendent Jones: No sir. The Stipendiary: He did not sell this as the combined article, for the Superintendent asked for coffee. I read a case where, on coffee being asked for, the Inspector was supplied with half-a-pound parcel, and the justices found that the chicory had been used fraudulently to increase the bulk, and the conviction was upheld by the Divisional Court. I see that this label says that the article is supplied to the trade by the Great Tower-street Tea Company, London. I think we have a case which warrants us in saying that this has also been fraudulently added to increase the bulk. The defendant ought to have sold this as French coffee. Defendant: I had two kinds with somewhat similar labels, and I made a mistake by giving one instead of the other. The other was pure coffee, or supposed to be so. A fine of £1, including costs, was inflicted.

"FRENCH COFFEE."

Catherine Lewis, grocer, Pontypridd, was brought before the magistrates in that town on Wednesday, charged with selling coffee mixed with chicory without stating that it was so. Superintendent Jones said that on May 25 he visited defendant's shop and asked for a quarter-of-a-pound of coffee. He was given a tin, for which he paid 3d. The contents of this tin was found to consist of 52 per cent. of coffee and 48 per cent. of chicory. The tin was labelled "French Coffee," but the complainant did not ask for such. Defendant: I told the Superintendent that it was a mixture. The Superintendent: I made a note that she informed me after the purchase was completed that the words "French Coffee" appeared on the label." The Stipendiary: You cannot expect to have a quarter-of-a-pound of pure coffee for 3d. Superintendent Jones: She did not tell me that it was not pure until after the purchase was complete, but I called her attention to the label before I left the shop. The Stipendiary: I don't think that much can be said about this, for, after all, the profit is very small upon it. (To the defendant): You had better take care in future, and when people ask for coffee, don't supply them with French coffee. You can tell them you have no pure coffee, and then offer the mixture. Then you will be all right. We dismiss this case, but do not forget my advice.

GIN.

John Warburton, of Sankey, was summoned at Warrington on the 21st ult., for selling a pint of gin three degrees below the quality allowed, and fined 10s. and costs. Mr. W. H. Jenkins defended, and pleaded that the abnormal state of the weather had caused evaporation.

At Driffield Petty Sessions, Henry Simpson Dove, landlord of the Rose and Crown Inn, Middleton-on-the-Wolds, was fined £2 and the costs for adulterating gin, by reducing it from 35 under proof to 43 under proof by the addition of 12 per cent. of water. The defendant admitted the charge, but pleaded that he did not know that he had done wrong. The Bench reminded the defendant that he had made himself liable to a penalty of £20, but as he had erred unintentionally they would deal leniently with him. Supt. Farrah prosecuted.

RUM.

At Thrapston Petty Sessions, William T. Bull, Ringstead, was summoned for a breach of the Food and Drugs Act, by selling adulterated rum, at Ringstead, on April 11th. Defendant pleaded guilty to selling the rum, but was not aware it was under the required proof strength. Mr. T. Clowes, Inspector, prosecuted, and defendant was fined 6s. and 19s. 6d. costs.

Charlotte Ashworth, of the Brown Cow, Horwich, was ordered to pay a fine of £1 and 8s. costs for selling to Superintendent Leeming three half-pints of rum, containing 11 per cent. of water beyond the legal limit. Mr. Leeming pointed out that a former husband of defendant had been fined, so that she knew something about offending in the way in question.

WHISKY.

At the Warrington County Sessions, on the 21st ult., John Johnson, Fiddler's Ferry Inn, Sankey, was fined 20s. and costs for selling a pint of whisky nine degrees below the 25 per cent. allowed.

James Martin, of the Black Bull Hotel, Horwich, pleaded guilty to two several charges of selling adulterated whiskey on May 19th last. Mr. Leeming (Superintendent of Police) gave evidence, which showed that he visited the premises and bought three half-pints of Scotch whiskey, and an equal quantity of Irish. Of both sorts he gave defendant one half-pint, retained another, and sent the third to Mr. C. Brown, Public Analyst, Liverpool. That gentleman's certificates showed the Irish to contain 8 per cent. too much water, and the Scotch 11 per cent. Defendant said he was not acquainted with the manner of testing, which his son usually did, but the latter had been ill. Ordered to pay costs.

ENFORCING THE ACTS IN IRELAND.

On the 14th ult., at Tomgraney Petty Sessions Court, Constable Thompson, of Scariff, prosecuted a publican for selling adulterated whiskey. The analysis of Sir Charles Cameron was produced in Court, and proved the adulteration. The defendant pleaded guilty, and was fined the nominal sum of 2s. 6d., it being the first case of the kind under the Act. The presiding Justice said that on any other case of adulteration under the same Act being proved before him, he would inflict the heaviest penalty.

BRANDY.

At Grimsby, John Murray, Lord Nelson Inn, Fulstow, was charged with selling to a person at that place on the 16th May, brandy which was not of the required strength. Supt. Stennett, stated that the brandy contained 29 per cent. of water. The magistrates imposed a fine of 14s. 6d., including the ordinary costs, and £1 0s. 2d. half the costs of analysis.

THE FOOD SUPPLY OF DR. NANSEN'S EXPEDITION.

Upon the recommendation of a leading Government Analyst, Dr. Nansen visited the London offices of Messrs. Armour & Co., and purchased a five years' supply of that firm's well known meat products. Dr. Nansen's unsolicited selection of Armour & Co.'s food is a high tribute to their quality, as we understand the Chicago firms preparations were, after careful enquiry, the only ones purchased for the expedition.

WHISKY FRAUDS UPON THE EXCISE. AN EXTRAORDINARY CASE. FINE OF £100.

At the Bolton County Sessions Room, on the 22nd June, Thomas Parkinson, lodging in Back King-street, Bolton, was placed in the dock charged with hawking and selling spirits at Sharples on the 14th, with preparing methylated spirits as a beverage, and also with selling such prepared spirits as a beverage.—Mr. J. T. Squire, Solicitors' Department, Somerset House, prosecuted on behalf of the Commissioners of Inland Revenue. Mr. Squire said that the prisoner was arrested on the 14th of June for selling spirits as whisky to Mrs. Mills, of the White Horse beerhouse, Old-road, Sharples. In consequence of information given to the police, Police-constable Brindle secreted himself behind a partition before the man went into the top room and asked Mrs. Mills to buy something which he described as the best whiskey. When the officer came out of his hiding place and asked him what he had got, the prisoner replied that it was a "rubbing bottle." Certain rectified spirits were allowed to be sold with nine parts of methyllic alcohol or wood naphtha, which was added to make the spirits nauseous. It was found, however, that people still drank the spirits, so that the Commissioners thought that another article should be added to the methylated spirit to make it still more disgusting. A couple of years ago, to accomplish this object, the Commissioners added petroleum, which, when added to water, turned it a milk colour. This milkiness could, however, be taken away by a very simple process. The prisoner at different times purchased at an oilman's in Bolton quantities of methylated spirits—less than a quart. He also obtained some "dropped black" or animal charcoal, and with this he separated the petroleum, after which he sold the spirit as very high-class whisky. In 1878 he was fined in that court £25, or three months' imprisonment in default, for a similar offence, and there were also other convictions against the man. The prisoner pleaded guilty on the three counts. With regard to the penalty Mr. Squire asked for a conviction in each case, so as to act as a deterrent to others. He should like it to go forth that any person who receives or buys or procures spirit from a person not having authority to sell is liable to a penalty of £100. Police-constable Brindle proved the offering of a bottle of spirits as whisky, which the prisoner tried to sell for 1s. 10d. He said he visited the prisoner's lodgings and found a tin funnel which contained some "dropped black" for filling purposes.—Mr. G. N. Stocker, Analyst, Somerset House, gave evidence as to having made experiments with the funnel, and stated that the petroleum had been extracted from the spirits which the prisoner had with him—Police-sergeant Shackleton testified to the conviction in 1878.—The chairman (Mr. W. Ainsworth) said the prisoner had a very bad record against him, and it was a wonder he had not killed somebody with the stuff.—A fine of £51 was imposed in the first case, £25 in the second, and £24 in the third; in default six months' imprisonment. The prisoner went to gaol.

THE SOMERSET HOUSE LABORATORY.

The Glasgow Herald, June 20th, says:—I hear that considerable alterations are likely to take place in the management of the laboratories attached to the Revenue Departments. Originally these were intended only for the testing of dutiable commodities prior to the levy of taxation, but their functions have gradually developed, in a great degree owing to the operation of the Adulteration Acts. The Customs' chemists, for instance, analyse imported teas, large quantities of which are in consequence returned abroad as being unfit for consumption, and those at Somerset House are arbitrators in disputes in connection with prosecutions for adulteration. In this capacity, it will be remembered, the officials lately got to loggerheads with the Society of Analysts. There is an idea abroad that, however suitable for the comparatively simple duty of finding the alcoholic strength of wines and spirits, the officials of these departments, being hardly trained chemists, are not fit for the more delicate work afterwards imposed on them. A Committee, of which Mr. Roberts-Austen, the Assayer at the Mint, and an eminent chemist, is chairman, is at present inquiring into the subject, and in the course of the investigation has visited several of the branch laboratories in the provinces. It is impossible to say at present what decision will be come to, the authorities being anxious to avoid undue haste in a matter which they regard as of great importance, but I am informed that there are two proposals before them—one to introduce regularly trained chemists in both laboratories, and the other to retain as referee a highly paid expert. The latter, is, I understand, favourably regarded, on the ground that for the bulk of the work a very slight knowledge of chemistry is required.

CUPAR FIFE AND A PUBLIC ANALYST.

The Town Council met on the 19th ultimo, Councillor Brown moved that the letter from the Clerk to the County Council requesting them to appoint a Public Analyst be allowed to lie on the table, and that they analyse their own food for a while longer. Bailie Macquene—I have much pleasure in seconding. This was agreed to.

In contrast with this stupid decision, the following from the *Blairgowrie Advertiser* is not without interest.

A Fifeshire County Councillor is responsible for the statement, that the people adulterate the whisky in the "kingdom," and one man had declared to him that "for 6½d he could make a bottle of the best throat-cutting mixture in the country."

THE LOCAL GOVERNMENT BOARD BEGINS TO STIR ITSELF.

YARMOUTH AND THE ISLE OF ELY REQUESTED TO ENFORCE THE SALE OF FOOD AND DRUGS ACTS.

At the last meeting of the Yarmouth Town Council a letter was read from the Assistant-Secretary to the Local Government Board, calling attention to the insignificant number of samples, in proportion to the population of the Borough, that was submitted for analysis during the past year, under the "Sale of Food and Drugs Act." Councillor Johnson said the greatest vigilance should be exercised to protect the public against adulteration. The Mayor concurred, and referred to the necessity for watchfulness in the Market to prevent the sale of anything like unwholesome food.

The Isle of Ely County Council also received a communication from the Local Government Board, requesting them to take steps to carry out the Sale of Food and Drugs Act more effectively. The matter has been referred by the Council to the General Purposes Committee.

These are healthy signs, and seem to show that the Local Government Board are at last beginning to realise the importance of this question, and to take a more than a perfunctory view of their duties.

THE CHIPPING NORTON MEAT POISONING.

THE BUTCHER SENT TO PRISON.

At the Oxford Assize Court on June 24, Baron Pollock concluded a trial in which George Kempson, a farmer and butcher of Oddington, Gloucestershire, was charged with the manslaughter of Maria Stanley, of Chipping Norton, on April 22. About thirty witnesses in all were examined, but the material facts can be stated briefly. On Saturday, April 15, the accused took into Chipping Norton from Oddington for sale, three pieces of beef, all of which were ultimately sold, one, weighing about 25 lb., being purchased by the deceased, the wife of an innkeeper in Chipping Norton. The subsequent history of all three pieces was traced by the prosecution, and it was clear that every person, with one exception, who ate of the meat was taken ill. The deceased and every member of her family, save one who had not eaten of the meat, were taken ill on Tuesday and Wednesday following the sale, and she died on Saturday, the 22nd. There was a very large body of medical evidence, that of Dr. Stevenson, of Guy's Hospital, the well-known toxicologist, being especially interesting. All the medical men agreed that death was due to ptomaine poisoning. Dr. Stevenson said that he had very frequently had before him in his laboratory articles of food containing considerable quantities of ptomaine, which he himself would have eaten without suspicion had they been placed on his table, and he mentioned a case last week of an eminent bacteriologist who had been poisoned, with the members of his family, by ptomaine after eating a veal and ham pie made in his own house. As to the previous history of the animal from which the beef was taken, there was some confusion, owing to varying statements alleged to have been made by the accused; but it appeared clear that the cow had calved on April 1, that she had a stoppage, for which a dose of salts had been administered, and that as this did no good, the accused determined to kill the cow. The slaughter was on Easter Monday, April 3, and three quarters of the carcass were sold all over the neighbourhood with no ill effect. The fourth quarter was divided into 15 or 16 pieces on April 15; some of these were sold in Oddington and some in Stow-on-the-Wold, as well as in Chipping Norton, and a curious fact was that although the pieces came from the same quarter of the animal, there was no illness amongst those who bought in Stour or Oddington, though all who ate of the pieces sold in Chipping Norton were ill. There was a suggestion that this cow suffered from milk fever, which it was proved, would make the flesh unfit for food; but this was negatived by the evidence for the defendant. The meat was sold at 4d., 5d., and 6d. per lb.; but it was proved that these prices were not unusual. The main question left by the learned Judge to the jury was whether the defendant when he took the meat into Chipping Norton, on April 15th, knew that it was not fit for human food. The animal might have been unsound when killed, or it might have been sound, yet have become unfit for food between April 3rd, when it was killed, and April 15th, when the meat which caused the illness was sold. The jury after some consideration, brought in a verdict of *Guilty*. Baron Pollock, in sentencing the accused to eight months' imprisonment with hard labour, referred to the immense public importance of protecting the poorer classes against unhealthy food, and especially against diseased or unwholesome meat. Mr. C. J. Darling, Q.C., M.P., and Mr. Reginald Smith prosecuted for the Treasury; and Mr. A. T. Lawrence and Mr. J. W. McCarthy appeared for the defence.

THE PROPOSED FOOD INSPECTOR FOR ECKINGTON.

At a public meeting at Eckington on the 15th ult., Mr. Job Rippon presiding, a resolution was moved condemning the appointment by the Chesterfield Board of Guardians of a Food Inspector for Eckington. The chairman thought that if the well-paid Inspectors already in office were to pay surprise visits to Eckington market, they would drop upon the offenders whose trade it was desirable to put a stop to. Dr. Hunter urged that working classes generally should carefully examine for themselves meat, fish, &c., before purchasing. An amendment was moved approving the action of the Guardians, but the resolution was carried.

CHOLERA IN ENGLAND.

On the 25th ult., the screw steamer Myrtle Branch, of Sunderland, arrived in the Tyne from Nantes, a French port, flying the quarantine flag. Mr. C. Irvin, Chief Inspector of the Tyne Port Sanitary Authority at once went on board the vessel, when it was found that William Owen, one of the firemen, had died somewhat suddenly during the afternoon. The master of the Myrtle Branch, Captain Denton, stated that the man was taken ill about five o'clock on Sunday morning, being severely attacked with cramp and diarrhoea. Under the direction of Captain Denton everything possible was done for the patient, but death took place about half-past two in the afternoon. Inspector Irvin having made a careful investigation of the case, the Assistant Medical Officer of Health was speedily summoned on board, and after examining the body, the latter certified that death was due to cholera. The remains of Owen were subsequently conveyed from the steamer to the Sanitary Floating Hospital at Jarrow Slake. Owen was 42 years of age, was a widower, and belonged to Hull. His remains were interred at Jarrow Cemetery yesterday afternoon. The remainder of the crew were minutely examined, and happily all were found healthy and well; but in case anything may transpire after they left the ship, their names and addresses were taken, and are in the possession of the Port Sanitary Authority. Under the direction of Inspector Irvin the greatest precaution was taken from the time of the steamer entering the Tyne, but after going through a most complete process of disinfection, the Myrtle Branch was yesterday afternoon released from quarantine.

ALLEGED INSANITARY BYRES AT CADDER.

In Glasgow Sheriff Court on the 21st ult., several cowfeeders in Cadder parish were before Sheriff Birnie in connection with complaints at the instance of the District Committee of the County Council for the Lower Ward of Lanarkshire. It was alleged that the premises of the respondents were insanitary, the grounds of complaint being principally defective drainage and ventilation of byres, the absence of proper dungsteads. In one case, where the respondent had put matters right since the lodging of the complaint, the Sheriff ordered him to pay 30s. of expenses. In another case it was remitted to Mr. Peter Fyfe, Sanitary Inspector for the city, to examine the premises and report. All the cases were continued until 4th July, when, on his Lordship's suggestion, the landlords will appear as well as the tenants, in order that it may be ascertained who is responsible.

SUSPECTED POISONING BY STRAWBERRIES.

A case of suspected poisoning from eating strawberries occurred in Wellington-avenue, Wavertree, on June 19th. It appears that a little boy and girl named Thomas, partook of some strawberries which had been purchased on Saturday night, and on Sunday morning both were seized with vomiting and internal pains. A doctor was called in, but the children grew worse, and the little girl died on Monday morning. The boy is now in a critical state.

From further inquiries it appears that Dr. Henry Harvey, medical officer of health to the Wavertree Local Board, was called in, and he certified that the children were suffering from blood-poisoning, which he believed had resulted from eating the strawberries.

ANSWERS TO CORRESPONDENTS.

SURVEYOR.—The water will be analysed and report sent in course of a few days.

ACCRINGTON, GROCER.—The vinegar in question is adulterated, and you would be liable to prosecution. You can procure genuine vinegars from any of the firms whose names you will find in our advertisement columns. Refuse any inducements to deal in other vinegars.

CONDENSED MILK, MANCHESTER.—The advice is untrue, appeals being still pending, and the decision of Justices Day and Lawrence, however senseless it is, settled nothing definitely. See convictions in our present issue.

CARBOLIC, KENSINGTON.—Calverts is genuine and full strength. The others you name we have not examined, but in one instance we know that one of the firms you name were selling a 7 per cent. as 15 per cent.

BAKING POWDER.—The appeal is still pending.

SCOTT'S EMULSION.—We do not know anything of the preparation. Virol is an excellent substitute for Cod Liver Oil, and you would do well to try it.

CHAMPAGNE, STETTIN.—We shall be glad to have the particulars you offer, and have posted the copies containing Snuff Frauds upon the customs, and the analytical papers you refer to.

THORNCLEIFFE DISINFECTANT.—We have no proof that the disinfectant is non-poisonous, or of the inaccuracy of the report. If you send us verified transcript shorthand notes of the evidence to which you refer, and independent analytical reports, we shall give them full consideration.

M. O. H.—See answer to Thorncliffe. We cannot say anything further on the question without further assurances.

SANITARIAN, GLASGOW.—Copies of vinegar cases were sent. We are quite of your opinion.

THE FRENCH BUTTER ADULTERATION LAW.

In a despatch to the Foreign Office, Sir J. A. Crowe, Her Majesty's Commercial Attaché at Paris, gives the following information respecting the present state of the law on the subject of the adulteration of butter in France:—

Several bills drafted by private members have been submitted to a committee of the Chamber of Deputies, and the result has been a proposition *de loi* supported by the Government reforming the law of March 14th, 1887, as follows:

Clause 1, enacting that no one shall be allowed to exhibit, sell, import, or export as butter, any product not composed exclusively of milk or cream, has already been voted. The next clauses, which are still under discussion, forbid the mixing of milk, cream, or butter with greases of any kind except in factories under state control.

No factories for the manufacture or distribution of margarine or other greases are allowed to start unless authorised and controlled by the State; and all greases, after paying an excise of 2frs., per 100 kilos., must be marked in case or cask with indelible letters describing them as margarine or food greases. The same description must be added to all receipts and invoices.

Imports and exports are subject to the same rules as home products, and heavy penalties are enacted against all such as contravene the statute.

ADULTERATED CHICORY.

At Thames Police Court on the 16th ult., Harris Goldberg, provision dealer, Bedford-street, Mile-end, was summoned at the instance of the Excise authorities for selling chicory adulterated with beet-root and mangle-wurzel without having an Excise label attached to the packages to show that they contained something in imitation of chicory. Mr. Lever, on behalf of the defendant, said his client would plead "Guilty." No attempt had been made to deceive the public, and the goods were sold openly, and in the same manner as they had been for the last 15 years. These packages were imported in bond, and each $\frac{1}{2}$ lb. package paid duty of one halfpenny. Consequently the Excise lost only a fraction of a penny. Mr. Dennis, who prosecuted, said the Excise duty was totally distinct from the Customs duty. Mr. Dickinson said it seemed as if people who chose to have something else than chicory had to pay the same as if they had the pure article. It had taken 15 years to find out what the stuff was. Mr. Dennis observed that it was most artfully manufactured, and an ordinary analysis would not discover what the ingredients were. Mr. Dickinson imposed a fine of 10s., including costs. Several other tradesmen were similarly fined.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended June 24th, 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities.	
		1892.	1893.
Animals living:			
Oxen, bulls, cows, and calves	Number	14,066	8,254
Sheep and lambs	"	658	868
Swine	"	—	—
Fresh meat:—			
Beef	Cwts.	39,638	16,458
Mutton	"	27,624	39,654
Pork	"	831	1,927
Salted or preserved meat:—			
Bacon	"	79,660	47,611
Beef	"	8,337	20,700
Hams	"	25,960	20,350
Pork	"	4,779	3,212
Meat unenumerated, salted and fresh	"	2,667	2,870
Meat preserved, otherwise than by salting	"	19,822	13,542
Dairy produce and substitutes:—			
Butter	"	54,075	41,445
Margarine	"	20,453	17,734
Cheese	"	60,382	60,482
Condensed milk	"	8,337	11,453
Eggs	Gt. Hndr.	205,846	354,244
Poultry and Game	Value £	2,464	2,071
Rabbits, dead (not tinned)	Cwts.	12	32
Lard	"	24,349	16,929
Corn, Grain, Meal and Flour:—			
Wheat	"	1,801,803	1,684,726
Wheat Meal and Flour	"	398,872	412,985
Barley	"	64,826	208,687
Oats	"	348,617	364,340
Pease	"	35,803	32,388
Beans	"	86,266	64,613
Maize or Indian Corn	"	745,584	762,359
Fruit, Raw:—			
Apples	Bush.	3,189	9,257
Oranges	"	—	18,384
Lemons	"	88,187	29,786
Cherries	"	35,201	21,907
Plums	"	1,248	7,238
Pears	"	—	1,467
Grapes	"	1,029	1,597
Unenumerated	"	20,088	55,935
Hops	Cwts.	527	1,835
Vegetables:—			
Onions, raw	Bush.	15,698	25,710
Potatoes	Cwts.	279,071	240,078
Unenumerated	Value £	30,676	52,071

* Not separated in 1892

Statistical Office, Custom House, } T. J. PITTAR.
London, June 26th, 1893.

To the EDITORS of FOOD AND SANITATION.

SIRS—The thanks of the community are due to you for disclosing the properties of "Valentine's Meat Juice," and other extracts. Many of the medical men here, I know, believe in Valentine's and recommend it. Kindly favour me with a dozen copies of your issue containing the article on that "Juice," that I may distribute them among the medical men here. The last child I lost was fed largely upon "Valentine's Meat Juice," and it is saddening now to know he might have had more nourishment had we known the constituents of the meat extracts.

Yours truly,
Hazelmere, Southport.

A. F. STEPHENSON.

Food & Sanitation

With which is Incorporated Food, Drugs & Drink, The Public Analytical Journal & Sanitary Review.

VOL. II. No. 48.

LONDON: SATURDAY, JULY 8, 1893.

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EXHIBITED.



The BRITISH MEDICAL JOURNAL (Jan. 21, 1893) says:—

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2/6 and 4/6
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2/- and 4/-
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ANNUAL SALES EXCEED 500,000 BOTTLES.

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Grocers will find this a good paying Coffee, without risk of Prosecution.

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Chafed Skin, Piles, Scalds, Chilblains,
Chapped Hands, Neuralgic and Rheumatic Pains,
Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites
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Food and Sanitation.

SATURDAY, JULY 8, 1893.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

MODEL DWELLINGS AT SHOREDITCH.

JERRY BUILDER, ESQ., AND MR. SLUM OWNER AGAIN.

The Times says:—

"At Worship-street, on July 1st, the parish of Shoreditch, by the Vestry Clerk, prosecuted Mr. E. Wilkin, Porchester-gate, W., the owner of some model dwellings known as Cossett's-buildings, in Boundary-street, for allowing them to be a nuisance and injurious to health. The Sanitary Officer of the parish, Mr. Alexander, said that 24 families tenanted the block. The premises, which were only put up 18 months ago, were so badly built that the sewage matter was running down the stairs from closets constructed on each landing. In a yard of about 100 ft. square there were standing accumulations of the same character, and tenants had to wade through sewage and past open and dismantled closets to get to their apartments. Mr. Rose expressed his astonishment that the place could ever have been allowed to have been so erected. The Vestry Clerk said that the owners deposited plans complying with the Building Act, and the Sanitary Authority had not to be considered. The state of affairs had existed for months, and now the owner wrote saying that it was useless trying to do anything to repair the place till the 'brutes' of tenants were evicted. Mr. Rose made an order to close the whole of the place, and the Vestry Clerk said, that no doubt the tenants would have to be removed by force."

There is something very rotten in our laws when a closing order is all the punishment that can be visited upon those responsible for such dens. As to the term "brutes," our readers can form their own opinions, but in ours it appears more applicable to the West-end owner of so vile a jerry-built scandal than to the poor whom necessity compels to herd in his abominations.

THE FOOD SUPPLY OF BLACKPOOL AND SOUTHPORT.

GOVERNMENT TESTIMONY TO THE TRUTH OF OUR STRICTURES.

FOR years past the Local Government Board has in its annual reports condemned the Town Councils of Blackpool, Southport, Scarborough, and other popular or fashionable health resorts for deliberately "burking" the Adulteration Acts. The last issued report says of Blackpool and Southport that no samples were submitted for analysis during the year. The previous year's report stated: "Within the jurisdiction of the County Councils of Monmouth, Oxford, Hereford, Pembroke, Cambridge, Montgomery, Radnor, and the Isle of Ely, no steps whatever were taken by the authorities charged with enforcing the law, and the same may be said of no less than thirty-two boroughs, some of which, like Northampton, Devonport, Tynemouth, Carlisle, Southport, Scarborough, and Dover, are of considerable population." As long ago as August 27th last year we commented on the results of this laxity on the part of Local Authorities, and instanced one case of a Southport tradesman, whom we well know, who cynically boasted that "he made £25 per week out of his margarine, and that it was not all labelled margarine." We are asked to name the traders doing this kind of swindle. Those who ask us well know that however necessary such a course is in the public interest, the journal doing so would incur heavy penalties. We prefer to go about the suppression of fraud in our own way, as we have done in regard to alum in baking powder and the vinegar impostures. We exposed these and killed the fraudulent trade, and our readers know enough of our journal by this to be satisfied that what we mean to do will be done. We have in almost every issue of this journal striven to induce these Local Authorities to do their duty by enforcing Acts designed for the public protection; and have shown that connivance at such frauds by Local Authorities is scandalously unfair to grocers who sell pure articles. Commenting upon the Southport and other Corporations above enumerated, the Local Government Board said: "In most of the cases mentioned above we have in previous reports called attention to the neglect of the Local Authorities to carry out the provisions of the Acts, and we regret that in these and other cases the local bodies responsible are content to neglect the powers with which the Legislature has entrusted them for the protection, not only of the consumers, but of the honest tradesmen who deal only in unadulterated articles, and who are now exposed to the risk of being undersold by less scrupulous competitors, upon whom the enforcement of the Acts would operate as a useful check."

Every plea of the Local Government Board has been ignored, and to take the most charitable view of places like Southport, ignorance has been the corporate king and fraud its minister, in so far as the Adulteration Acts are concerned. We must confess that the utter hopelessness of pleading to Local Authorities to enforce the Food and Drugs and Margarine Acts, and give honest grocers and provision dealers fair-play, has, in the cases of Southport and Blackpool, worn out what stock of patience we possess, and relying not upon Local Government Board reports, but upon personal knowledge, and purchases made in various parts of each of these towns, we were driven to utter in our issue of June 24th, some plain home truths to the rulers of these health resorts. Our exposures have been taken to heart, and despite abuse of that terrible type to which journals of the *Eatonsville Gazette* order have subjected us, we have hopes that the purpose for which our exposures were made will be achieved, that the Acts designed for the public protection will be enforced, and that the honest tradesman will be protected against the fostered fraud and rascality of "the best the world produces" class of traders, whose knavery cuts the throat of the grocery trade, plunders the public, and damages English agriculture to the extent of millions yearly. Both Southport and Blackpool newspapers allege that there are Inspectors and Analysts in the employ of the Corporations. We would like proof of this. We can find no record of a Public Analyst appointed by either Corporation, or of Inspectors whose duty it is to obtain regularly samples of food, drugs, or drink for analysis. Dr. Campbell Brown, to whom a few samples are sent by the County Authorities is not, as far as we can gather, a Public Analyst appointed by the Corporation of Southport or by the Corporation of Blackpool. The careful selection of samples to send to him for analysis, which invariably prove genuine, may satisfy writers of local journals who must lash their fanciful spirits to pamper the pride of the local shopkeeper, or—fearful calamity—lose his advertisement; but neither satisfies nor hocusses us, nor will it impose upon our readers. We know that adulteration, that mean fraud fostered by shopkeeping local rulers is, like Bella Wilfer's petticoat, there. We do not believe that it is the fault of either Medical Officers or Sanitary Inspectors that it exists—for they are as powerless to act against the will of the corporations in Blackpool or

Southport as they are in Yarmouth, Bury, Devonport and Tynemouth, in Blackpool's neighbour—Preston—or even in fashionable Scarborough. One cannot make omelettes without breaking eggs, and apparently one cannot move these authorities to do their duty to the public and to honest grocers without exposing their backslidings, and bringing them into the fierce light of publicity. We trust to see that duty done properly in Southport and Blackpool, if not, we shall do it for them in a manner that will be as unpleasant to the dishonest trader as it will be fair to the self-respecting grocer.

Commenting on the existing state of things, the Local Government Board say: "It is surprising that the Local Authorities, in these and many other cases, are content to leave the inhabitants without the protection against fraud by the sale of adulterated food, which the exercise of the statutory powers conferred on the authority would be likely to ensure."

In the face of such a condemnation, there is evidence of either the coolest impudence, or the most paralysed of understandings in the articles published by our Blackpool and Southport contemporaries anent our exposures.

PRACTICAL PAPERS FOR GROCERS.—No. 4.

THE VINEGAR IMPOSTURES AND THEIR EFFECT ON ENGLISH TRADE. THE SALE OF ACETIC ACID AS VINEGAR DECLARED ILLEGAL.

Grocers who took the advice we gave them on January 14th last, have cause for congratulation. We then warned the trade against the rapidly growing practice of vending acetic acid as vinegar. Through the length and breadth of England, since we first called attention to this fraud, prosecutions have been instituted, and in some places, as, for example, Glasgow, as many as seven prosecutions for this adulteration are now pending. As usual, however, the adulterating manufacturers strive, as in the alum in baking powder fraud, the condensed skimmed milk, and other abominations that our exposures have dragged into the light of day, to make the unfortunate grocer a dupe, and behind him to fight public health, and crush English industries. Nothing could be more shortsighted than this readiness of retailers to lend themselves to the purposes of manufacturers of spurious goods. It brings the grocery trade into disrepute, crushes it down to a point in which a fair living is impossible, and causes the retailer who submits to be the adulterating manufacturer's dupe, to be dragged from Court to Court at cost of loss of time and business. When will grocers learn wisdom and deal only with firms who will guarantee their products genuine? If the grocer be then prosecuted for adulteration, his duty to his fellow retailers and to his own character should lead him to resist any inducements to shield the dealer who has victimised him. The public weal and his own interest alike demand that he should bring an action against the wholesale dealer, and at once clear himself and stop the fraud. To take as an instance the imposture of vending diluted acetic acid, coloured with caramel as vinegar. Nothing is truer than that bad trade affects at first hand the retail grocer. It is of him that the penniless housewife asks credit until better days arrive; and, as the grocer knows to his cost, a large amount of his hard earned scanty profits goes to aid in this way many an unfortunate out-of-work family. But why are our towns thronged with hopeless workmen vainly seeking employment? The answer is easy to find: It is because of frauds like this of vending dilute acetic acid as vinegar. Real vinegar made from malt and grain requires that barley should be grown for it, and employs English labour, but acetic acid made in Germany employs very little English labour. Grocers might with benefit to themselves ponder on the fact that since within the last ten years rubbish of any kind has been used for beer making, and acetic acid began to be used instead of English barley for vinegar making, the land under barley crops in the United Kingdom has decreased by 500,000—half a million of acres—throwing thousands out of employment and raising the rates. We have so much of Germany at our Court, and in all positions where work is little and pay is great, that for our part we do not hesitate to say that "Made in Germany" has become an eyesore to us, and we are more concerned to see the workmen of England earning good wages, to see fewer unemployed, and grocers making better profits, than to see German acetic acid driving English barley growing out of existence, and turning thousands of English labourers from their villages to suffer misery and starvation in our large towns. It is these considerations that lead us to express our gratification that the attempt to intimidate the Birmingham Authorities from doing their duty to the public—for all these appeals fought by manufacturers are in reality attempts of this character, throwing as they do the onus upon the Corporation of spending hundreds or even thousands of pounds over the suppression of fraud in the case of a purchase value a few pence—failed, and that henceforth vinegar must be pure, or its vendor cannot hope

to escape punishment. This appeal came before the Recorder of Birmingham, and occupied a day-and-a-half in the hearing. The learned Recorder's judgment was undoubtedly the ablest ever delivered in the trial of a food adulteration case. Our readers will remember that in our issue of May 27th we reported the case, when it was tried before the magistrates. The appeal was heard on July 3rd at the Birmingham Quarter Sessions, before J. S. Diggle, Esq., Q.C., Recorder, when:—

William Kirby, 69, Digbeth, fish dealer, appealed against a conviction made by Messrs. W. N. Fisher and H. P. Ryland, justices of the peace for the city, on May 19th, for an alleged offence under the Food and Drugs Act. Mr. T. Terrell (London) and Mr. Foster (instructed by Jacques and Sons) appeared for the appellant, and Mr. Hugo Young and Mr. Symonds (instructed by Mr. Bell from the Town Clerk's office) for the respondents.

Mr. Hugo Young, in opening the case for the respondents, said the appeal was against a conviction by the Birmingham magistrates, under Section 6 of the Food and Drugs Act 1875. The section provided that "No person shall sell to the prejudice of the purchaser an article of food or drug that is not of the nature, substance, and quality of the article demanded by such purchaser." He said that on April 13th Inspector Davis, in pursuance of his ordinary duties, went to appellant's shop and demanded half a pint of vinegar, for which he paid one penny, the price of best vinegar. After the purchase Davis observed the particulars required by the Act before the vinegar was submitted for analysis. The Public Analyst reported that the liquid contained 70 per cent. of pyroligneous acid dilute, and consequently proceedings were taken. The question arose in that case what was properly sold under the designation of vinegar. In order to go back to the commencement, he thought it was obvious to everybody that the term vinegar was derived from *vin aigre*, the French for sour wine. He believed that wine allowed to go sour under atmospheric conditions would produce vinegar, and no doubt that was the origin of vinegar known at the earliest time. What they said was, the mode of producing vinegar was that they first of all must have alcohol, which was converted by atmospheric oxygen by the process called acetous fermentation into acetic acid. In the course of the production of that acetic acid the various properties of the wine remained, along with the acetic acid which was produced by the conversion of the alcohol, and therefore what they had to see was what vinegar consisted of. He thought it was right from their point of view, it should consist of dilute acetic acid, plus the other properties of the wine. They defined vinegar as a liquid consisting essentially of impure dilute acetic acid obtained by the oxygenation of alcoholic liquid. The real point was whether, without that alcohol as the basis, without which they did not get the other properties of vinegar, it was right to call the liquid vinegar. It had been said that these precautions, if upheld, would interfere with a large industry, but there was no desire to interfere with the sale of acetic acid made from the distillation of wood. If this liquid served the purposes of vinegar then the public would buy it, and there would be no reason for selling it as vinegar. At present it was sold under a designation it did not properly bear, and the only object could be to mislead the public. If the appellant's case, that the liquid sold was better than vinegar, why not sell it under its distinctive term, and let the people know what they were buying?

Thomas Davis, Inspector under the Food and Drugs Act, deposed to purchasing the vinegar from Mrs. Kirby. He informed Mrs. Kirby that the liquid was for analysis, and she then said that it was not malt liquor. She also replied that she did not mind, as she had had a letter from the firm that supplied it, saying they would be responsible for any proceedings which might be taken against her husband for selling it. Cross-examined: He went to appellant's shop on his own account. He had previously noticed that there had been prosecutions in different parts of the country, and was aware the question had been raised as between vinegar and malt vinegar. He did not ask for malt vinegar purposely. He was unaware that there were in the trade distinction between vinegar and malt vinegar.

Dr. Alfred Hill, Medical Officer of Health and Public Analyst, gave a description of his analysis and the composition of the liquid submitted to him. True vinegar, he said, was made from the juices of plants, the fruits, sap, or any material extracted by water. Pure acetic acid could be produced in a cheaper form than by getting it from alcohol. The common source of obtaining acetic acid for commercial purposes was from wood. Cross-examined: Malt converted into alcohol, then acidified, and then distilled, was not in his opinion distilled vinegar. It was not vinegar in the ordinary sense. Mr. Terrell: Do you know that persons who produce vinegar in that way are called vinegar makers by Act of Parliament? Witness: Distilled vinegar makers. Mr. Terrell: No, vinegar makers. Witness: I should apply the qualifying adjective. In answer to further questions, witness said that he did not know of any vinegar maker who sold vinegar as uncoloured. He believed so-called malt vinegars were coloured with caramel. Mr. Terrell: Do you think that adulteration? Witness: I don't call it adulteration; I think it is done simply to pander to a vitiated public taste.—You are going to put that vitiated taste right? I leave that to you.—He did not think that pure vinegar made from malt was unsuitable for the manufacture of pickles, and he did not know that such vinegar was dosed with sulphuric acid to prevent it going musty. The so-called vinegar made from wood was not so liable to go musty. Witness had certified that the vinegar sold to Davis contained 70 per cent. of pyroligneous acid, but it really contained more. He had given the vendor the benefit of every weak point.—Mr. Terrell. Was not the real reason you certified the 70 per cent. that you did not analyse the vinegar at all? Witness: That's an insult, and I decline to answer.—Mr. Terrell: Was not

the real reason that you only distilled off the acetic acid and weighed the residue? Witness: I decline to answer the question. I don't come here to be insulted.—Mr. Terrell: I am not insulting you. Witness: Then your code of morals is different to mine.—The Recorder pointed out to the witness that counsel was asking him how he conducted the analysis, and witness replied that he would answer if counsel were courteous.—Mr. Terrell: Did you do anything more than distill off the acetic acid? Witness: You know I did. I will repeat it for you, since your memory is so short. Witness detailed the method of his analysis.

Mr. Terrell admitted that the liquid in dispute was made from wood, and the question was whether it came under the term "vinegar" or not.

Mr. Otto Hehner, Mr. Jones (Wolverhampton), Analyst, and Mr. A. H. Allen (Sheffield and London), Analytical Chemist, gave evidence, and agreed that the liquid in question could not properly be called vinegar.—In cross-examination, Mr. Allen said that as a food there was little difference between the malt vinegar and the liquid in question, but as a stimulant to latent digestion there was a difference. Several grocers and drysalters also gave evidence, and said that when they were asked for vinegar they supplied malt vinegar.—William Shingleton, formerly a maker of pyroligneous acid, said that he believed the difference in cost of making acetic acid as distinguished from malt vinegar was between 1½d. and 6d. per gallon.

For the appellant, Mr. Terrell said that the case was one of great importance, because that was the only tribunal before which that matter could be brought as a matter of final appeal. He took it that it must be a question of fact whether that was vinegar or not, and therefore one upon which it would be difficult, at any rate, to state a case. The trade which was attacked had grown for at least seventy or eighty years, and during that time a great industry had been developed in manufacturing acetic acid from wood for the purpose of vinegar making. Extensive works had been constructed in South Wales and elsewhere, and an enormous amount of capital had been invested in these works. Up to about three months ago the trade had remained absolutely unchallenged. The question to be determined was really what was the scope of the word "vinegar." He was going to suggest and asked the Court to find, that any potable form of acetic acid might be defined as vinegar. That there were several different forms of acetic acid there could be no question. Step by step science had progressed, and new discoveries had been made, and among them being that of the making of vinegar from the destructive distillation of wood. This industry had grown up under the eyes of the law, and had been openly conducted for many years. He should call evidence to show that the liquid in question was absolutely better than vinegar made only from malt or malted grain.

Professor Atfield, F.R.S., of Watford, and 17, Bloomsbury-square, London, editor of the *British Pharmacopæia*, said that in his opinion there was no one fluid that could claim the word "vinegar" for a name. Vinegar belonged to a class, and was a generic term. He was familiar with vinegar made from wood, and when that substance was properly prepared it could legitimately be called vinegar. He was acquainted with the manufacture of vinegar, and was consulted by various vinegar manufacturers. To his knowledge there was no so-called malt vinegar properly made now. He looked upon the term "malt vinegar" at the present time as a misnomer, and he should call malt vinegar vinegar made from malted grain alone. The malt vinegar commonly so-called was not, strictly speaking, malt vinegar. With regard to the substance in dispute he had known of that for nearly forty years, and considered it came under the generic term of vinegar. It was not fair to call it pyroligneous acid. He considered the dietetic value between malt vinegar and the liquid in dispute was absolutely insignificant. There was nothing injurious to health in the substance as far as he was aware; it fulfilled all the uses of vinegar. Cross-examined: He could not give an exhaustive inclusive and exclusive definition of vinegar. His definition was acetic acid and water sufficient to make it potable.

Dr. Suckling said he had heard the evidence of Professor Atfield and generally agreed with it.

Mr. H. Grimshaw, Manchester, Analyst, and Mr. F. Sutton, Yarmouth, Analyst, also gave evidence.

In continuation of the evidence for the appellant, Mr. J. Taylor, of Torquay, Public Analyst and Consulting Chemist, said that dilute acetic acid had been sold as vinegar for very many years. It was very pure, and was superior to malt vinegar by reason of its containing neither sediment nor vegetable matter, the latter being liable to putrefaction. By Mr. Young: He preferred the acetic acid coloured to the malt trade vinegar, and thought that the term vinegar was justly applied to it. By the Recorder: He had heard of champagne being made in England. If it were not made from the grape he should not call it champagne. Mr. Henry Evans, Inland Revenue Officer, stated that the Somerset House Authorities recognised pyroligneous acid as vinegar, and compelled all manufacturers of it to hold licenses.

Mr. B. Biggs, of London, drysalter, stated that since the beginning of this century vinegar had been made from acetate of soda. To his mind any acid with a pleasant flavour would be vinegar. The Recorder: Is it the flavour, then, that makes the vinegar? Witness: It depends upon the person's taste. In reply to further questions, the witness said that in preparing red herrings and hams pyroligneous acid was used.

Mr. Woolway, of the City Vinegar Company, Bristol, said that he had made vinegar from pyroligneous acid, and took five prizes with it at the Paris Exhibition.—By Mr. Young: Witness in reality was the appellant in this case. Probably the public would not buy the diluted acetic acid so readily if they knew what it was.

Evidence as to the long-continued practice of selling the substance

in question as vinegar was given by Mr. Robert Hemming, of Summer-lane, and Mr. S. Main, of Bromsgrove-street, grocers, the witnesses stating that it had always given satisfaction to their customers.

Mr. Terrell, summing up the appellants' case, said that his clients had proved by the highest scientific evidence that, as far as dietetic or food value went, the vinegar in question was equal in every practical respect to that made from malt or grain. Vinegar, he contended, was a generic term to be applied to such substances which were sold as vinegar, and answered the purpose of vinegar, but when one wanted to distinguish one kind of the liquid from the other, one must describe what he particularly required. Those who wanted wine vinegar would ask for it; those who wanted grain vinegar would say so, and so on. Vinegar made from pyroligneous acid had been sold for many years, and the makers of the malt-grain vinegar had no exclusive right to the term vinegar. The Act of George III. showed that "vinegar" and "acetic acid" were synonymous terms, for the Act made a person a vinegar maker the moment he began to purify and rectify acetic acid, and brought himself within the cognisance of the excise. This trade had been in existence for a hundred years, or thereabouts, and its growth had never been attacked till a few months ago. The business had been recognised by legal decisions, and had submitted to the operation of the excise duties upon vinegar. The suggestion that it should be called by some other name than the one under which it had long been regularly sold was a suggestion that would apply to many other articles of commerce. It would be a very serious thing if the Court should come to the conclusion that this was an illegitimate and fraudulent trade, and if the appellants should be compelled to sell their product under another name than that under which they had legally, as he contended, sold it so long.

Mr. Young, in his reply on the whole case, said that the object of such prosecutions as this was that when people asked for one thing they should not be given another. The contention that the defendants were recognised in certain Acts of Parliament for excise purposes as vinegar makers, and that, therefore, what they sold as vinegar would, if sustained, enable any person who treated acetic acid in such a way as to come under the excise to sell any of his products, even pure acetic acid as vinegar. The appellants' case really was that they only were entitled to call their product vinegar, and that the real malt vinegar must be given some specific name.

Mr. Terrell said that the appellants had repudiated this construction of their case. What they contended was, a person asking for vinegar might lawfully be supplied with either of the different kinds. Mr. Young said that without putting the words into his friend's mouth he was quite entitled to say that the effect of their arguments being admitted would be what he had stated. He asked the Court to say that if these people wanted to carry on this trade, which nobody desired in the slightest degree to interfere, they must carry it on honestly and straightforwardly. When the appellants admitted, as they had admitted, that to get the public to take it it was necessary to give it a false name, and that the public would not take it under any other name their case was gone. He contended that the term vinegar must be limited to the fermented article, which contained something besides acetic acid, and that acetic acid was not entitled to go through the world with two names, at one time being described as acetic acid, and at another being allowed to masquerade as vinegar.

The Recorder said that he saw no useful purpose to be served by reserving judgment. Having listened very carefully for a day and a half to the arguments so ably adduced on both sides, he thought he was in a position to give his decision at once. The question really was whether the substance which had been sold on this occasion by the appellants could be allowed to bear the name of vinegar. If it ought not to be sold as vinegar, then there had been sufficient prejudice to the purchaser to justify a conviction under the Food and Drugs Act. There was no dispute as to the constitution of the substance. As to whether it was entitled to be called vinegar counsel for the appellants had, with great skill and perseverance, endeavoured to establish the affirmative on three grounds. The first ground was that the substance was recognised by law as vinegar. Without going through the Acts of Parliament and the decisions that had been quoted he (the Recorder) would say that he had come to the conclusion that the contention that vinegar and preparations of acetic acid were in law the same thing could not be accepted. The object of the Acts of Parliament quoted was to take care that certain excise duties were enforced, and for that purpose they enacted that persons who had or received into their custody and possession, amongst other things, any vinegar, or acetous acid, or other matters for certain purposes should be deemed vinegar makers. Those enactments did not mean to enact that acetous acids should be vinegar, or that the makers or purifiers of acetous acid or pyroligneous acid, although they were to be deemed vinegar makers for the purpose of these Acts, should be entitled to have the acetic acid which they produced termed vinegar. He thought that the words "deemed to be vinegar makers" showed conclusively that it was for the purpose of these duties that they were to be taken under the generic name "vinegar makers," which included a number of things, and he could not hold that it had been recognised by these various Acts of Parliament that dilute acetic acid, coloured, was vinegar. The decisions that had been quoted, and which had reference to excise questions, he interpreted in the same manner, and therefore the argument depending upon recognition by law was unfounded. As to the second point, whether this mixture was entitled by long use to be termed vinegar, evidence had been given that for a great number of years it had been sold as vinegar. On the other hand it was admitted that the public had not known that it was merely dilute acetic acid coloured that they

were buying, and that it had not been discovered by the public till quite recently, when the analysts had found it out, what the exact constituents of the substance were. Therefore he did not think that this substance had made out its title by long use to be recognised as vinegar. The third point made by the appellants was that the substance was really vinegar in point of fact. It was clear that before the invention of this substance the original definition of vinegar was a vegetable juice or infusion, which had passed through alcoholic or acetic fermentation. In the "British Pharmacopœia," Professor Attfield, F.R.S., defined vinegar as a substance "prepared from the immixture of malted and unmalted grain by acetous fermentation." He was surprised, therefore, to hear Professor Attfield, F.R.S., say on Monday that this definition of vinegar, for which he was responsible in so important a publication as the "British Pharmacopœia," was put in simply for the preparation of soap plaister. On the very same page of the book the professor, alluding to vinegar, stated what the dose was to be; and he could not believe that a gentleman of eminence who was responsible for so important a publication could have been guilty of what would have been unpardonable carelessness of putting in such a definition of such an article as vinegar simply for the purpose of soap plaister. But in the "Pharmacopœia," in addition to defining vinegar, Professor Attfield, F.R.S., had also defined dilute acetic acid. Therefore he (the Recorder) came to the conclusion that as far as Professor Attfield, F.R.S., was concerned, the definitions of vinegar and of dilute acetic acid were distinct. Reviewing the other expert evidence, the Recorder pointed out that Mr. Allen had said that dilute acetic acid not produced from any process of fermentation was not vinegar, but was "as different from it as silent spirit is different from wine." In fact, in the evidence one might just as well be called upon to decide that alcohol and water was wine as that coloured acetic acid and water was vinegar, for alcohol was as much the essential of wine as acetic acid was the essential of vinegar. Therefore the case of the appellant seemed to be a *reductio ad absurdum*. Under these circumstances he was forced to the conclusion that what was sold in this case was not entitled to the name of vinegar. He did not think there was very much weight in the arguments of the great disturbance of trade that would be caused by a decision adverse to the appellants. In a case of that kind the law could not take that into consideration at all, but he would point out that a similar argument was used with regard to margarine. It was said that the public would cease to buy margarine if that substance were given its proper name, but it was common knowledge that the margarine trade was now in a more flourishing state than ever before. He had no doubt that his decision in this case, which if it, should he confirmed elsewhere, would have a far-reaching effect, would cause a good deal of disturbance and inconvenience to the manufacturers of this article. The substance, however, was no doubt extremely valuable for many things, and served the purpose of vinegar in many ways, and he could not help thinking that the discussion which had been raised by this case must have shown the public the value of the substance for what it was as well as what it was not. The article appeared to be a valuable thing in itself, and would find its place in commerce, and therefore he did not think that in the end the manufacturers of it would be at any loss. But it was not entitled to be called vinegar, and consequently the appeal must be dismissed, with costs against the appellant.

After this decision we hope grocers will leave spurious vinegar severely alone. If they do not, then they will only have themselves to blame if they are hauled before the Courts.

THE CITY OF LONDON UNION AND CONDENSED MILK.

At their last meeting the Out-Relief Committee recommended that no alterations be made in the present arrangements with regard to the supply of condensed milk to the outdoor sick poor. They had found the milk, they said, to be of good quality, and also that the medical officers, at their discretion, ordered fresh milk for the outdoor poor, which was supplied by local tradesmen on the order of the relieving officer. The Rev. E. C. Hawkins regretted that the committee should have come to this conclusion, as he considered that condensed milk was of no use at all to sick persons. He moved that the matter be referred back for further consideration. After discussion, the amendment was negatived by 21 votes to 12, and, on the motion of Mr. Woodbridge, seconded by Mr. Lile, it was resolved that a sample of the Board's condensed milk be analysed.

WEST SUSSEX.

In his report to the West Sussex County Council, Mr. Otto Hehner, Public Analyst, says that during the first quarter of this year the total number of samples submitted for analysis under the Sale of Food and Drugs Acts was three. They consisted of samples of yeast, of which one was genuine yeast, the two others being mixtures of yeast and starch. The report proceeded:—The Sale of Food Act has therefore been practically a dead letter in your division of the county during the last three months, a matter which is much to be regretted, as an enormous amount of adulterated food, especially milk and butter, is sold, to the detriment of the consumers and the agricultural classes. In the whole of Sussex there are, as nearly as I can ascertain, 3560 establishments for the sale of food, drink, and drugs. The Local Government Board has for some years past recommended that for every 1,000 inhabitants at least one sample should annually be examined, a proportion which corresponds to about one sample to be taken every five years from each vendor. This is surely a very modest requirement. But at the rate of working of the last twelve months (with a total of 87 samples) not much less than 25 years must elapse ere each vendor in your division of the county is visited only once by the Inspector.

FRY'S COCOA.

At the Glamorganshire quarter sessions on June 28th, Mr. Thomas Jones, grocer, appealed against a conviction by the Ystrad magistrates, for selling Fry's Pearl Cocoa.

Mr. Lewis appeared for the appellant, and Mr. H. L. Stephen for the respondent. Mr. Stephen said this was an appeal against a conviction by Mr. Ignatius Williams, the Stipendiary Magistrate at Ystrad, under Section 6 of the Food and Drugs Act, on May 29. On December 22, 1892, Superintendent Jones, Glamorgan County Council Food and Drugs Act Inspector, went to the shop of the appellant, and asked for a quarter of a pound of cocoa. The appellant handed him a packet of "Fry's Pearl Cocoa," wrapped up in a sheet of white paper. The sample was sent to the County Analyst, and Superintendent Jones received a certificate to the effect that it consisted of 30 parts of cocoa and 70 parts of other materials, such as starch and sugar. Under Section 8 of the Act the sale of a compound was allowed, provided there was a label upon it distinctly or legibly written or printed to the effect that the same was mixed. It was upon an alleged compliance with that section that the present ground of appeal was based, but he should show that the section was not complied with. On the packet inside the wrapper there was a label stating that what was sold was a mixture. That, however, was covered over when the packet was handed to the Superintendent, which, he submitted, took it out of the section. If that label were good, covered as it was by a wrapper, it would be equally good though it were inside the packet at the bottom of the cocoa. However, supposing the notice were good, he took another point. He submitted that the amount of starch and sugar discovered in the mixture was such as to take it out of the section of the Act of Parliament. The quantity was so large that it was, to use the words of the Act, "fraudulently added with the intention to increase the bulk and weight of the articles sold." Cocoa could not be supplied in a pure state because of the presence of oil generally known as cocoa butter, which was injurious to health. The oil was removed by one of two methods—either by adding something to counteract its effect, or by crushing out the oil. He submitted that 70 per cent. of starch and sugar was unnecessary to be added to the cocoa for the purpose of making it palatable, but that it was added fraudulently to increase the bulk and weight. Superintendent Jones then gave evidence. Mr. Stephen: At the time you made the purchase was your attention called to this notice: "Contains cocoa, combined with other ingredients, the perfect purity and wholesomeness of which are guaranteed in accordance with the Act of Parliament"? Mr. Lewis here called attention to the notice on the label. The article, he said, was sold as a compound article, the perfect purity and wholesomeness of which were guaranteed, and he was proceeding to ask the witness whether he saw this, when Judge Williams interfered. Did not the word wholesomeness (he asked) mean that the extraneous ingredients were also in accordance with the Act of Parliament? Mr. Lewis said there was no standard laid down as to proportions in the Act of Parliament. There was no statutory proportions guaranteed. The notice was a full compliance with the Act of Parliament. It told the purchaser that he was not buying pure cocoa, but "Pearl" cocoa. In re-examination, witness said he never saw the notice on the label at the time of the delivery. He had not seen it yet. Judge Williams said he did not think that would help the case. It was the purchaser's business to see what he was getting. The general public would do so. The Superintendent went for the purpose, if possible—he would not say of endeavouring to get a conviction—but of taking advantage of every point in favour of a conviction if it should turn out that this stuff was mixed with other ingredients; but an ordinary customer would take the packet in his hand—in fact the obligation was cast upon him to do so—and see what he got. It was not sufficient for the Officer to say that he had not an opportunity of seeing what it was. He might have said to the seller, before he wrapped up the packet, "I want to see what the label is"; and if the packet had been wrapped up he (Judge Williams) should say it was the Superintendent's duty to open the outside wrapper and see what he was buying. Mr. Stephens: It was the Superintendent's duty to go into the shop, and behave as an ordinary customer would. Judge Williams: Well, an ordinary customer, I say, would do as I have described. Mr. Stephens: I submit respectfully that an ordinary customer would probably take the cocoa, and not think twice about it, but go away at once with the article, and it was such carelessness that the Act sought to protect people against. Judge Williams reminded the learned counsel that the packet in question was not covered over with white paper at the time the officer bought it. Mr. Stephen: No, but the packet was not his until it was handed over to him. Judge Williams: Strictly speaking, probably not, but the contract was no doubt concluded the moment the officer said, "Give me a packet of cocoa." He might have said to the seller, "Don't wrap it up." It was his duty to take the outside wrapper off, and see what was on the label. Mr. Fowler thought the onus was on the seller to see that the article supplied was the article demanded. Mr. Stephen said if a man sold margarine, and wrapped it up in paper, the paper must have the word "margarine," on it. Therefore the Act contemplated that the outside paper must have the name of the article on it. Mr. Lewis addressed the Court on behalf of the appellant. He contended that it was an undue straining of the Act to suggest that a packet, which taken from the shelf was perfectly open to observation, did not comply with the provisions of the Act simply because the seller wrapped the packet in a piece of paper. What were the provisions of the Act? They were that if at the time of the delivery of the article demanded the seller supplied a notice to the purchaser, by means of a label

distinctly or legibly written or printed to the effect that the same was mixed, he complied with the Act. He submitted that this was done in the present case. True the word "mixed" was not used, but the word "compound," which was to the same effect. As Judge Williams had pointed out, the officer had an opportunity of opening the parcel and seeing what he was buying, and this was what an ordinary purchaser would have done. He submitted that they had complied with the condition laid down in section 8. They had sold and delivered to the purchaser an article which contained a notice legibly printed that the same was not pure cocoa, but a cocoa combined with something else. There was a case decided a few weeks ago, in which the notice was so small that it had to be read with a magnifying glass. He referred to the case of *Attfield v. Tyler*. It concerned Epps' cocoa, and was noted in 57 "Justice of the Peace." In that case the cocoa was mixed with 40 per cent. of starch and sugar. There was a wrapper round the packet stating that the cocoa was mixed. The justices held that the label did not state distinctly that the cocoa was mixed, as the type was so small that it could only be read with a magnifying glass. They convicted; the case went to a Divisional Court, who held that the justices were wrong in convicting.

The Clerk of the Peace said the judgment in that case was on the ground that Epps's cocoa was asked for. Judge Williams said he could not take that case as supporting Mr. Lewis' contention unless he saw the actual report. Mr. Lewis thought he was justified in taking advantage of every point in favour of his client. Though the notice in that case was so small that it had to be read with a magnifying glass, it was not a fatal objection to the success of the appellant. Judge Williams: You don't say, however, that that was the ground on which the appellant succeeded? Mr. Lewis said he could not say that. If the Court were against him as to the sufficiency of the notice, he would have to ask them to state a case, because the manufacturers did not know now how to protect themselves. With regard to the second point, which was the main point relied upon, namely whether the admixture of these ingredients with the cocoa was intended fraudulently to increase its bulk—he submitted that was a question on which the Court were entitled to review. He called their attention to the case of *Outley v. Edgley*, in which a grocer was charged with unlawfully selling French coffee not of the nature, substance, and quality demanded, the bulk being fraudulently increased with chicory. There the Justices found that the chicory was added fraudulently to increase the bulk. On the question of price, he would call before them Mr. Fry, because the price was most material when they came to consider the question whether there was any fraudulent addition to this cocoa. "Fraudulently added" meant that it put something into the pockets of the manufacturers at the expense of the purchaser. Now the mixing of cocoa with farinaceous food, such as arrowroot and flour, had been a recognised practice since George II. In order to get rid of the fatty substances which existed in cocoa nibs, it was necessary to add farinaceous foods to make them soluble. Cocoa nibs, if bought in the nib form, were 1s. 5d. per lb. Prepared cocoa—soluble cocoa—in a pure state was 2s. 8d. per lb. The price of "Pearl" cocoa was 8s. per lb. It was found in this case that 30 per cent. of the $\frac{1}{2}$ -lb packet of cocoa sold was pure cocoa, the remaining 70 per cent. being farinaceous powder, which was sago and sugar. Therefore nearly a third of the whole was cocoa: a third of 8d. was a fraction under 2d., so that the man got within a fraction two pennyworth of cocoa when he got that packet. Mr. Fowler: How is a purchaser to know all that? Mr. Lewis said if a man, when he bought a quarter of a pound of "Pearl" cocoa got twopennyworth of pure cocoa, there could be no fraud. There was no question of an enormous profit made by the manufacturers. The man got full value for his money, and therefore it could not be pretended that these ingredients were fraudulently added. The only question that could arise was: Had the ingredients been fraudulently added to increase the bulk? The case of *Liddiard v. Reece* had been quoted. In that case the Court had before them the question of price. The price charged for the article sold was the price of the pure article. If they had sold Superintendent Jones a quarter of a pound of "Pearl" cocoa, and charged him 8d. for it, then they would have had a strong case on the question of fraudulent addition. But they sold an advertised admixture of cocoa at a quarter of the price of the pure article. Mr. Fowler said a collier's wife knew nothing about the commercial price of an article. She asked for a quarter of a pound of cocoa, and she got Fry & Son's "Pearl" cocoa. She thought she had got something magnificent for her money, and was entirely ignorant of the fact that she was going to make cocoa with 70 per cent. of starch and sugar. Mr. Lewis said this article had been in the market for thirty-five years, and had given general satisfaction to the public. If they did not complain, surely it was evidence that they got what they wanted. Mr. Joseph Fry said he was senior partner in the firm of Messrs. J. S. Fry & Co., of Bristol. The analysis produced that day was substantially correct, except that the farinaceous substance used was sago, not starch. The "Pearl" cocoa had been on the market for between thirty and forty years, and the ingredients had been substantially the same during its entire manufacture. The notice was affixed to the packet in consequence of the passing of the Act of 1875.

Mr. Lewis: The sufficiency of this notice has never been questioned has it? Witness: It has never been sufficiently questioned in any court of law. Mr. Fowler: What is the meaning of the word "Pearl"? Witness: That word is used on account of the granulated state of the powder. Examination continued: Witness said the mixture of sugar and arrowroot was made for the purpose of making the cocoa more soluble. He considered that the label on the packet

implied that the cocoa was not in its natural state. The retail price of pure soluble cocoa was from 2s. 8d. to 3s. per lb. The nibs were cheaper—1s. 5d. per lb.—and were not so much in demand as the soluble cocoa. They were simply the kernel of the nut just crushed. There was no pure cocoa which could be got for 8d. per lb., except the refuse part of the cocoa called shell or husk, which was sold at a very low price. That was used in Ireland to a certain extent. It was sold at a lower price than even "Pearl" cocoa. Mr. Lewis: Is there any suggestion that this arrowroot and sugar are added to the cocoa with any intention to fraudulently increase the bulk? Witness: Certainly not. We do it quite openly. As a matter of fact there is 30 per cent. of cocoa in this combined article?—Yes. What would that represent in money?—Rather more than twopence. What is the reason for mixing arrowroot and sugar with the cocoa?—To produce an article easily soluble in boiling water. You can't have soluble cocoa without some farinaceous substances?—Not to be sold at that price. You may have pure soluble cocoa partially soluble. Cross-examined by Mr. Stephen, witness said there was some oil in the natural nut. In making this mixed cocoa they generally employed cocoa from which the oil had been already extracted. Fry's Caracas cocoa contained about 50 per cent. of arrowroot and refined sugar. In perfectly pure cocoa there was nothing added. In Fry's cocoa extract there was nothing added. It was perfectly pure. They made forty or fifty varieties of cocoa to which something was added. "Pearl" was one of their cheaper productions. A small quantity of oil was extracted from the "Pearl" cocoa—about one-third of the bulk of the whole weight of the cocoa. They could not extract the whole of the oil chemically. In coffee-houses they largely use cocoa of this kind. Mr. Stephen briefly replied on the evidence, contending that the notice was concealed when the packet was sold to the officer. He did not for one moment contend that the food as supplied was unwholesome, but he submitted that the 70 per cent. of farinaceous food substances was added not necessarily to deprive the customer of his money's worth of cocoa, but in order to fraudulently increase the bulk. The question was, Did the purchaser get what he asked for? He asked for cocoa. Was it right to give him cocoa with 70 per cent. of other things added? Judge Williams said it all turned on the argument whether the notice was good. If it were, what was the fraud? Mr. Stephen: Adding 70 per cent. of something to make the packet look larger. Judge Williams: But the man gets his two pennyworth of cocoa. Mr. Stephen: But suppose he asks for five shillings worth of tobacco, and gets tobacco and hay, does he get what he asks for? Judge Williams: Yes and more. He gets the tobacco, and he gets hay also. (Laughter.) The Court then deliberated, after which Mr. Fowler said he regretted to announce that the Court was divided. They did not agree in their finding. Therefore the decision of the Court below stands. Mr. Lewis asked the Court to state a case on the two points. Whether there was sufficient notice and whether there was any fraudulent addition to increase the bulk. Mr. Fowler said it was not necessary to cite the points on which they differed, but they would grant a case. Mr. Stephen asked for costs. The Court said that costs would abide the appeal. If there was no notice of appeal before July 25, the costs would have to be paid by the appellant.

MEAT PROSECUTIONS.

At Liverpool Police Court, on the 28th ult., a butcher named Thomas Clough, of Runcorn, was charged with having sent the dead carcase of a pig to the Liverpool abattoir to be sold, which carcase was entirely unfit for human food. Mr. Moss prosecuted. Inspector Renton stated that on the 23rd ult. he saw the meat exposed for sale. Its then condition rendered it unfit for food. Inquiries had shown that the defendant had killed and dressed the pig. Under a magistrate's order the carcase was destroyed. Inspector Luya described the carcase as "rotten from head to tail." The defendant, in answer to the magistrate, said he considered that the animal was quite good enough for food. Although the animal looked sound when killed, he confessed that when sending it to market it looked "soft." Mr. Stewart asked the defendant if he was aware that if a person died in consequence of eating that meat he (defendant) would be liable to be indicted for manslaughter. A man had recently been sentenced to eight months' imprisonment for an offence of that kind. He considered that the offence in this case was a deliberate one, and the defendant should be imprisoned for fourteen days, without the option of a fine.

At the Derby Borough Police-court, on the 15th ult., John Hay, of Upper Hill-street, Derby, was summoned for having in his possession, on the 12th May, nine pieces of meat which were diseased, unsound, unwholesome, and unfit for the food of man. The Town Clerk (Mr. H. F. Gadsby) prosecuted, and Mr. Stanger, Barrister-at-law, defended. The case from the outset turned upon the contentious scientific question—What is the effect of tuberculosis? The having the meat in his possession was admitted by Hay, whose Counsel, however, urged that local hard grape—tuberculosis in a solid state—did not render the whole of the carcase unfit for food. Dr. Iliffe, the Medical Officer for Derby, expressed his opinion that the carcase was quite unfit for food, as the lungs and glands were one mass of tuberculosis in the second stage. Mr. Stanger thought that as the Bench would, after he had called his evidence, see that scientific men were honestly at variance on the subject, they ought to dismiss the case. Messrs. William Whiting, Frederick Wright, and Walker, butchers, who saw the carcase in the mortuary, considered it to be in good condition, and "a good body of beef." Mr. Frank Gibbons, F.R.C.V.S., Provincial Veterinary Surgeon to the Royal College of

Agriculture, and Mr. William Taylor, M.R.C.V.S., Veterinary Inspector to the Borough of Nottingham, both disagreed with Dr. Iliffe that a carcase affected locally by tuberculosis was unfit for food. The Bench decided to fine the defendant £1 on six of the pieces, making in all £7 11s.

At Birkenhead, on the 16th ult., Thomas Wood, butcher, 57, Exmouth-street, was summoned for selling to Mrs. Annie McLean, of Craven-street, 1-lb of beef kidney which was unfit for human food. Mr. Bromfield, Deputy Town Clerk, prosecuted. On the 9th ult., Mrs. McLean bought the kidney at defendant's shop, and finding after reaching home that it was bad she took it back. Defendant refused to change it, saying it was good enough for her. She informed the police, who notified the Health Department. Inspector Wagstaffe seized the meat, and along with the Medical Officer obtained a magistrate's order for its destruction. Both officers said the kidney, when they saw it after purchase, was badly decomposed and unfit for food. Mr. J. T. Thompson defended. He attributed the condition of the kidney to the hot weather, and contended that the defendant had no knowledge that it was bad. The magistrate said the case was a bad one. As a practical man he must have known what the condition of the meat was; and his refusal to re-examine the meat and take it back when he had the chance made the offence worse. A fine of £3 16s. 6d., including the costs, was imposed.

FISH.

At Derby Police-court, on the 15th ult., Henry Brown, Queen-street, was summoned for exposing seven fish for sale, on the 13th May, on his stall in the Market-place, which were unfit for human food. He was also summoned for having in his possession, in preparation for sale, 32 pieces of fish, which were likewise unfit for the food of man. The offence was denied. Defendant now said 32 fish in basket were never intended for sale, and were left there to be taken away as offal by the cart which went round the market on Saturday nights. The Bench decided to convict, and as there was a previous conviction, imposed a fine of 50s. and costs.

At Exeter Police-court, on the 16th ult., Alfred Tootell, of West-street, was summoned for exposing for sale for the food of man 36 whiting, which were unwholesome and unfit for such food. Mr. G. R. Shorto, the Town Clerk prosecuted. Mr. John Webber, Assistant Sanitary Inspector, gave evidence to seeing the defendant in Exe Island, selling whiting at 1½d. and 2d. per dozen. He examined them and found that they were rotten. He took them to Mr. Brash, surgeon, and afterwards to Mr. Knapman, a Magistrate, who ordered their destruction. He could smell them a hundred yards off. Mr. Brash said they were unfit for food, and if eaten would have caused serious illness. The Bench characterised the case as a very serious one, and pointed out that the penalty was £20 for every fish sold. They imposed a fine of 10s. and cost, the alternative being 14 days' imprisonment.

AN EXAMPLE FOR BLACKPOOL, SOUTHPORT, AND SCARBOROUGH.

Sarah Eccles was fined 10s. and fees, or 14 days, at the Douglas High-Bailiff's Court, on June 3rd, for selling milk which was adulterated with water.—Inspector Cain said that on the 29th May he had purchased a pint of milk from the defendant's cart which had seven-and-a-half per cent. of water added. Our English seaside resorts show us no similar instances of regard for the public well-being. Southport has no Analyst and has taken no samples for years. Blackpool is equally disgraceful; and last year fashionable Scarboro' only took three samples for 33,776 population.

HULL AND SANITATION.

A guileless ratepayer asks in the *Eastern Morning News*, a poser of the Hull Sanitary Committee:—

"I saw it stated in one of the evening papers last week that one of the officials of the sanitary department is a selected candidate for the position of Sanitary Inspector at Swansea. Can the Chairman (Alderman Fraser, I believe) or any other member of the Sanitary Committee account for this continual emigration of inspectors from the above department? As a ratepayer, I wish to protest against this sort of thing, and would suggest that the men, when appointed, should agree to remain for a certain term—that is, providing they are paid the standard rate of wages. It must be acknowledged that the continual resignations and anxiety to obtain situations elsewhere which appear to be so prevalent in this branch of the Corporation service, must necessarily prevent that department from being in a truly efficient state, consequently the general public have to suffer."

When the Hull Corporation learns that good service is worth fair wages, their officials will not be in a hurry to move elsewhere, but until then, other more enlightened towns will get the benefit of their meanness and blindness.

SOUVENIR OF THE SANITARY INSPECTOR'S VISIT TO MAIDSTONE.

Mr. G. E. Hibling, photographer, 125, Week-street, Maidstone, has produced an excellent group of the visitors photographed at Maidstone Waterworks. The likenesses are excellent, and the grouping effective and artistic. The photograph is one of the best specimens of the art we have seen.

At the Lawford's-gate Petty Session, on the 22nd ult., Reuben Watkins, milk dealer, of Parsons-row, Lower Easton, was summoned for selling milk adulterated with 18 per cent. of water. Mr. Holman Gregory (Gregory and Hirst) defended the accused, who was fined 40s. and costs, or in default one month's imprisonment.

ANNOTATIONS.

MAGISTRATES: A CONTRAST.

Two convictions for milk adulteration recorded in our present issue are instructive. In each the excuse was identical. The purchaser in one instance was defrauded of 20 per cent. of cream, and in the other of 25 per cent. of cream, but the vendor responsible for the 20 per cent. escaped with 2s. 6d. fine, whilst the one guilty of 25 per cent. abstraction was mulcted in a £5 penalty. As the £5 one is none too severe, the 2s. 6d. one is surely farcical. A great deal of rubbish is just now being talked about the politics of magistrates. In our experience, the unpaid, whatever political form of disease they may suffer from, have that of pure, unadulterated idiocy in a very malignant form, and the Lord Chancellor would be far better employed were he to circularise the existing Dogberries, and point out how their ignorance allows the public and farmers to be plundered, than in changing tweedledum to tweedledee. If a few of the worst offenders were removed from the commission of the peace, it would open the eyes of the rest; and it is a lesson much needed. In another case recorded in our present issue, the Basingstoke Bench fined a publican 1s. and costs for diluting whisky 32.45 degrees under proof. Surely magistrates who consider that to defraud the public of 7.45 per cent. obtained by selling water as whisky, merits only 1s. fine, ought not to sit on a bench in Court. Their place is obviously a home for the mentally imperfect. The country sadly needs more stipendiaries like the one at Hanley, and less of these Basingstoke and Gravesend monstrosities. We wonder what the commissioners of Inland Revenue have to say about these incitements to fraud?

THE NEED FOR A SPECIAL SHAPED POISON BOTTLE.

The past few weeks have witnessed more lamentable preventible deaths by poison. The accidental poisoning of a student by his nurse could not have occurred had the poison been in a pyramid-shaped bottle. Again, at Middlesborough, a fortnight ago, a man went into a stable to attend to his horse at night, and it appears that it was his custom to drink a bottle of porter there. When the horse had been seen to this time, however, he drank from a bottle of carbolic acid instead, and, although he received immediate attention, he died in about forty minutes. A man has also died at Durham from drinking by mistake carbolic acid supplied by the Durham Sanitary Authority. It came out in evidence that the authority had supplied the poison for thirteen years and had never labelled the bottles, so that it is no wonder that there are accidents.

TINNED MEAT POISONINGS.

The *Illustrated London News*, July 1, says:—

"Cases of poisoning by tainted food have of late been somewhat numerous. Whether this is due in part to the warmth of the season or not is a matter difficult to decide. Nor is it possible, I fear, to suggest any preventive measures, except the one advice—to avoid tinned meats, pies, and like provisions altogether. It is certain, at least, that the evil effects are due either to the poisonous ptomaines generated in the meat or to actual germ-action itself. Be that as it may, the lesson conveyed is one of care in the purity and preparation of all such foods, and of seeing that none are used after being kept too long, or, in the case of tinned meats, after exposure to the air."

Some day, when a few score more persons have been poisoned, the manufacturers themselves may take the trouble to enquire into the causes and how to prevent these poisonings. With the Chipping poisoner in prison a good beginning in the direction of compelling such enquiry has been made.

TRYING TO REACH THE SWINDLING BREWER.

A Bill has been laid before Parliament of one clause, and it declares that every person who sells or exposes for sale any beer, ale, or porter containing ingredients other than hops or barley malt, shall keep conspicuously posted at the bar or other place where the article is offered for sale a legible notice stating what other ingredients it contains. The penalties proposed for infringements of the law are—For a first offence a fine not exceeding £5; but in the case of a second or any subsequent offence the amount is raised to £20. Happily the Bill contains no warranty clause, so that publicans will, if convicted, have to prosecute the brewer. We sincerely hope to see the measure become law.

ST. GILES' BOARD OF WORKS AND THE ADULTERATION ACTS.

There seems at last, and none too soon, for the ratepayers' protection, to be a disposition on the part of St. Giles to enforce thoroughly the Sale of Food and Drugs Acts. At the last meeting discussion arose on the question of a report of the Sanitary Committee. Eventually, on the motion of Mr. Berridge, the subject was referred back to the committee with instructions to make suggestions as to how best to suppress adulteration.

THE SCANDALS CONNECTED WITH THE ROYAL SOCIETY.

We have long had experience of the fact that one of the colossal humbugs of England is its Royal Society, with its members who lend themselves, their names, their titles and their supposed scientific pre-eminence to puff this soap or that extract, and even flout—to the shame of the noblest of all professions—their heavily-feed opinions before judges and juries in defence of abominations innumerable. We have long felt a sincere pity for the half-dozen or so of real scientists belonging to the toadying mutual-admiration-and-self-glorification-Royal-Society and have again and again wondered "*que le diable ils allaient faire dans cette galère.*" It is well, however, that even in the most toadying and useless of bodies a few earnest cant-haters should find a place, the more so if they strive by hook or crook to purge what ought to be a great representative English Association of that which keeps it from being either great or worthy of honour. Our readers will learn with unmixed satisfaction that the President and Council of the Royal Society have transmitted to all the Fellows of the Society an "expression of opinion" which was adopted by them at their meeting on May 18th. The opinion was in the following terms:—

"The attention of the President and Council of the Royal Society has been called to certain advertisements appearing from time to time in the public newspapers and in various trade journals and circulars, containing certificates and statements signed by Fellows of the Society. These certificates and statements are not in all cases confined to mere analyses or simple matters of fact, but occasionally include expressions of opinion as to the subject matter of the advertisements, and laudatory passages which assume much of the character of an advertiser's encomium. The President and Council fully recognise the liberty of the Fellows to give, when consulted, authoritative statements on chemical analysis or any other scientific facts on which they are called upon to advise. They feel, nevertheless, that in some of the trade certificates already mentioned due regard has hardly been paid to the status and dignity of the Royal Society, and they are of opinion that the issue of such certificates tends to act injuriously upon the reputation of the Society. They are, however, confident that when attention is called to the subject all the Fellows will endeavour to express any statements relating to matters of trade or manufacture in such terms that no suspicion of mercenary motives or commercial partisanship can possibly attach to them."

There are a number of cases of adulteration appeals pending, wherein, unless they vary their practice, we look forward to seeing a representative gathering of the Royal Society clan twisting science and the English language to prove black to be white for heavy fees. We shall see what the Royal Society will do to stop this class of scandal, or the means by which water supplies that are impure to the verge of danger are certified, in the interests of water companies to be as void of pollution as the soul of an angel. May we hope they will not stay their reforming hand with the present feeble-forcible resolution, but speak out straight from the shoulder against practices that, unless rigorously checked, will bring their Royal Society beneath contempt?

LONDON AND THE WEIGHTS AND MEASURES ACTS.

At West London Police-court, on July 1st, a case, of which there should be more in the Metropolis, was heard before Mr. Haden Corser. A man, engaged by the Master Bakers' Association, bought at the shop of a baker "a twopenny" loaf. This loaf was not weighed when sold, and on being tested at another baker's was said to be 2 ozs. short of a half-quartern. The vendor was summoned for not selling the bread by weight, but his assistant proved that that character of loaf was usually sold by description and price, and not by weight, though if weighed the charge was twopence farthing. The defendant's solicitor impugned the other baker's weights and scales, concerning the correctness of which no evidence was before the court. Mr. Haden Corser dismissed the summons, with two guineas costs against the Master Bakers' Association.

We do not understand this decision, unless the bread be French bread, fancy bread, or rolls. It is an offence against the Acts to sell bread at so much per loaf. Cottage or tinned loaves or quartern loaves are not fancy bread, and the sale of such by denomination instead of by weight is illegal.

MR. BEAUFOY AND THE ADULTERATION ACTS.

A Grimsby grocer writes:—"Apropos of a recent case here, I shall be interested in watching how Mr. Beaufoy votes upon the Food and Drugs Act Amendment Bill, and on Mr. Horace Plunkett's Margarine Bill. If he wobbles about as the *Veto* Bill, opposes Mr. Plunkett's measure, or supports Dr. Cameron's abortive Act, I shall ask you to give me space for a few necessary questions of importance to my fellow tradesmen and to the general public."

DOES CREWE WANT A MEDICAL OFFICER OR SELF-RESPECT?

We give the following advertisement free insertion:—
BOROUGH OF CREWE.—Medical Officer of Health; doubly qualified. Must reside in the borough, and devote his whole time to the duties of the office. Salary, £200 per annum. Applications to Frederick Cooke, Town Clerk, Municipal Offices, Exchange-street, Crewe, by July 12th."

We do not know if Crewe really wants a Medical Officer, or is spending its money in making public the fact that its Town Council is apparently as void of shame as it must be of sense. It is preposterous to suppose that any Medical Officer of capacity would devote his whole time to the duties of the office for such a salary, and the Town Council that degrades itself by this advertisement wants self-respect apparently far more urgently than they do a Health Officer who is doubly qualified. Surely a Town Council boasting of even the small amount of common sense which these bodies have, must see that any medical man accepting a post with such a salary attached, is only making a stepping stone of it to something better.

MR. HANNAY AND THE SHORING OF UNSAFE STRUCTURES.

At Marlborough-street, in the course of the hearing of summonses against the owners of five houses in Bear-street, Leicester-square, for failing to make certain alterations required by the London County Council, Mr. R. Walker, the District Surveyor for the parish of St. Martin's-in-the-Fields, said that he reported a wall to be dangerous, and the owner was allowed a reasonable time to shore it up, but did not do so. In commenting upon this evidence, Mr. Hannay said he considered that the Council ought to have shored the wall up at once, and that he was not sure that the Council could not be indicted for neglecting its duty towards the safety of the public. Mr. Thomas, of the dangerous structures department of the London County Council, said that the matter had already been considered by the Council, and that it was thought best, in view of the large number of old structures that they would be called upon to shore up, to give the owner a reasonable opportunity of doing it himself. He would, however, lay the magistrate's remarks before the next meeting of the Building Committee. Mr. Hannay made orders for the required work to be done in each case within 21 days.

MORE FOOD POISONINGS.

A large number of children at the Forest-gate district school, London, are at present suffering from the effects of poisoning. Altogether 132 children have been poisoned, and two cases have terminated fatally, although most of the children have recovered. The school is intended for the maintenance of pauper children from the Poplar and Whitechapel Unions. On Friday, the 23rd ult., some 30 boys were seized with acute vomiting and diarrhoea, and shortly after about 20 girls were similarly affected, and were prescribed for by Dr. Bell, the Medical Officer. The same night other children were affected, and on the following morning a boy named Edwin Puttick, aged 14 years, died after severe vomiting and purging. On the Saturday, Sunday, and Monday other children were attacked, bringing the number of sufferers up to 132. On Tuesday afternoon Anna Fish, aged 13 years, died with similar symptoms.—Mr. Lewis, Coroner, opened an inquest on Tuesday, and Mr. Charles Duncan, the Superintendent of the school, stated that the dietary the day before the first attack consisted of milk and water and bread and butter for breakfast, soup for dinner, and bread and milk and water for supper. On the Wednesday the children had salt meat, and the soup was made on the following day from the stock. The meat was supplied by a London contractor, and there was nothing suspicious about it. The milk was also supplied by a London contractor.—Dr. Bell, the Medical Officer, who had made a post mortem examination of the boy Puttick, stated that death resulted from inflammation of the intestines, but he was unable to specify the cause of the inflammation.—The inquiry was adjourned, and an analysis of the contents of the deceased children's stomachs will be made.

FOREIGN MILK AND INFECTION.

In the House of Commons on July 3rd inst., Mr. Long asked the President of the Local Government Board whether his attention had been called to the large quantities of milk imported from Hamburg and other foreign places; and whether, if it was the case that the dairies and cowsheds from which this milk was sent were subject to no proper sanitary inspection, he had considered if the sale of such milk might not constitute a grave danger to the health of the public. Mr. H. Fowler: I am informed by the Board of Customs that during the present year the value of liquid milk and cream imported into the United Kingdom was £630. Of this sum £613 represented the value of the importation from Holland, and £17 the value of that from Denmark and Sweden. We have no information with regard to the sanitary inspection of dairies and cowsheds in the three countries named, and I am informed by the medical department that they have no evidence that the importation of this milk constitutes a grave danger to the public health.

WATER IN BUTTER.

Mr. Thomas A. Forrest, is Chief Inspector and Superintendent of the Cork Butter Market. For over a quarter of a century Mr. Forrest in the discharge of his duties has had daily under his observation large consignments of butter from all parts of Munster, and for many years it was not unusual for him to class between seventy and eighty thousand firkins during the twelve months. Mr. Forrest is Butter Examiner to the Munster Dairy School. In a recent interview Mr. Forrest was asked, What is the usual percentage of water in honestly-made butter?

The normal percentage ranges from 9 to 16. It is rare to find the percentage under 9, and I am of opinion that it is undesirable to deprive butter of its moisture to too great an extent. For my part I would prefer butter containing 10 or 11 per cent. to that containing only 9 per cent. 11, 12, 13, and 14 are the usual percentages.

What is the highest percentage of water which butter, not fraudulently prepared, can contain? I have found in the case of all butter containing over 16 or 17 per cent. that water was always added. It would be an unusual thing to find that butter having more than 17 per cent. was not adulterated. The softest sample I ever saw contained 16 per cent., and the water was dripping from it. In such cases the market value is very low.

And can water be added to butter without interfering with the article's solidity? Water may be added to the extent of 20 per cent., and the butter still preserve a solid appearance. It is here the deception comes in.

If you were fixing a standard, what would you say? I would leave it an open question; but I think there should be no prosecutions in cases where the moisture did not exceed 17 per cent. It would not be safe to prosecute a man for having butter containing not more than 17 per cent. As I have just told you, I have known a case in which the moisture was actually dripping out of the butter and the percentage was 16, and yet no water had been added or fraud of any kind attempted.

And what is a low percentage of water.

I have never found the moisture go below 9 per cent., and in this case the butter was "dried-out" as much as possible and in cool temperate weather. In high class butter the percentage generally varies between 12 and 13, and it seldom exceeds 15. At 15 or 16 the butter is very soft.

To what causes may this high percentage in purely-made butter be attributed.

To bad making or the weather. Very good butter can be made at the beginning of June, for, although the weather is hot, the air is dry. But when the wind blows from the South, and is accompanied by a drizzling rain, it is very difficult to produce firm butter. The direction of the wind exercises a great influence in the production of soft, watery butter. July is a bad month, but the worst weather is when the air is charged with electricity. A good many "failures" that is, butters containing an exceptionally high percentage of water—result from such weather. And with regard to making, it may be laid down as an axiom that the softer butter is when churned the more moisture it contains, and the greater the difficulty in expelling the moisture.

On what percentages, Mr. Forrest, have you obtained convictions?

The course adopted in our market with regard to prosecutions is extremely fair. In all cases where adulteration is suspected the Inspector confers with the other Inspectors. A careful examination is made, and, if the suspicion be confirmed, the butter is seized. Then the case is handed over to the trustees, who, if satisfied, transmit the butter to the analyst. If adulteration be proved a prosecution follows. In most of these cases the percentage has exceeded 20, and has sometimes reached 30, water being added in all instances.

But you say, Mr. Forrest, that you would not fix a standard?

It would be dangerous to fix too low a standard. Twenty is much too high, but, from my experience, butter may contain 16 or 17 per cent. of water and be unadulterated.

LARD WARRANTY.

At the Houghton Petty Sessions on June 22nd, before E. Richardson, Esq., and H. R. I. Webster, Esq., Richard Smithson, grocer, Easington-lane, was charged with selling adulterated lard. Mr. B. Scott Elder, Chief Inspector of Food and Drugs for Durham County, prosecuted, and Mr. H. T. Crow, of Sunderland, defended. Mr. Scott Elder briefly stated the facts of the case, and said that the analyst had certified that the lard contained 8 per cent. of beef fat. He had received notice from the defendant's solicitor that he would rely upon a certain printed warranty which was stamped on the bladder from which the lard was sold. The words on the bladder were "Warranted Pure—Star Brand." He did not know whether his friend really intended to submit that this was a written warranty within the meaning of the Act. Mr. Crow, for the defence, said he intended to rely upon the warranty already referred to, and contended that writing included printing. He was prepared to call the defendant, who would state that he had not adulterated the lard in any way, and, therefore, he asked the Bench to accept the warranty, and dismiss the case against his client, who was not in any way to blame. Mr. Scott Elder said he would have been glad if he could have accepted the warranty, in order that he might take proceedings against the person who had given it; but as it stood, it was not such a one as would form the basis of a fresh action. He contended that the warranty must be in writing, and compared Section 8, which provides for a "written or printed" label, with Section 25, which provides only for a "written" warranty. Moreover, the warranty in question bore no signature. The Bench, after considering the matter, decided to reserve their decision for one month.

ADULTERATION PROSECUTIONS.

MILK.

At Dunmow, on June 19th, Richard J. J. C. Pratt, a lad in the employment of Mr. John Livermore, of Langley's, was charged with selling a pint and a half of new milk from which one-fifth of the original cream had been abstracted, on May 12th. Mr. F. J. Snell defended. Superintendent Megran deposed to the purchase of the milk, and produced the report of the County Analyst. Mr. Snell said the defence was that the milk was quite pure and had not been tampered with at all. Mr. Livermore said he saw his cows milked on the morning of May 12th. He saw the milk poured into the milk can in the usual manner, and he locked the can and kept the key. The defendant stated that he took over the can of milk to sell. He could not get at the milk to take any out or put anything in. The milk he served the Superintendent with was just as he drew it from the locked-up can. Mr. Snell pointed out that milk varied a great deal in quality, and the Bench dismissed the case.—John Sams, a milk-seller, of Great Dunmow, was similarly charged. In this case the Analyst's report stated that one-fourth of the cream had been abstracted. The defendant said there was nothing taken away and nothing added to the milk. The Chairman said the Bench had decided to convict. The defendant had been convicted before of a similar offence. The defendant: Yes, but that was for nothing at all, and it is for nothing now. He was fined £1 and 12s. 6d. costs.

At Grimsby, on June 26th, Walter Randall, farmer, of Ivy Cottage, Healing, was summoned for selling adulterated milk. The milk was bought by Sanitary Inspector W. Moody of the defendant's son as new milk, on the 19th May, and upon analysis was found to be adulterated with 10 per cent. of added water. Mr. Mason said the defence was that the defendant had nothing to do with it. He sold the milk to his son at 8½d. per gallon, delivered it at the Healing Railway Station, and had there done with it. The magistrates had no doubt that the milk had been adulterated, by whom they could not tell. There were, however, doubts in the case beyond that, of which they should give the defendant the benefit. The case was, therefore, dismissed.

At Warwick Borough Court, on the 26th ult., Joseph William Archer and John Millican Archer, dairymen and farmers, of Budbrooke, were summoned for selling adulterated milk. Mr. Brabazon Campbell (Town Clerk) prosecuted, and Mr. Crowther Davies defended.—Francis F. Trepeso (Inspector) stated that he purchased a sample of new milk from the defendants' salesman, and it was sent to the Borough Analyst (Dr. Bostock Hill), who certified that it was 25 per cent. deficient of natural fat.—For the defence, Mr. Barclay (Analyst of the firm of Southall Brothers and Barclay, of Birmingham) said that 4 per cent. would fairly represent the deficiency.—In consequence of the marked divergence of the expert evidence, the magistrates adjourned the case until Wednesday for Dr. Bostock Hill to be present and give evidence.

At Woolwich Police-court, on 16th June, James Messer, 30, Prospect-row, Woolwich, was fined 40s. for selling milk adulterated with 26 per cent. of water.

At Houghton-le-Spring Petty Sessions, on the 22nd ult., T. Bruce, farmer, was charged by Mr. B. S. Elder, Inspector under the Food and Drugs Act, with selling a pint of milk, which was adulterated with 5 per cent. of water.—Mr. Isaacs defended.—The sale was proved by George Wilson, assistant to Mr. Elder.—Mr. James Redpath, farm agent to Lord Durham, Mr. Joseph Hall, farmer, and the defendant, were summoned to show that owing to the prevailing drought the grass was not of the quality sufficient to keep up the strength of the milk. The cows were drinking more water.—The case was dismissed.

At Manchester Police Court, on the 21st June, Thomas Hughes, Streetfold Farm, Moston-lane, Moston, was summoned for having sold milk not of the nature and substance demanded. Mr. A. T. Rook, Superintendent of the Sanitary Department, prosecuted on behalf of the Corporation. On the 31st May, Inspector Holland purchased a pint of milk, for which he paid 1½d., from Mrs. Hughes, who was out serving customers in Rochdale-road, Harpurhey. This milk on being analysed by Mr. Estcourt was found to have been deprived of its fat to the extent of 20 per cent.—The defence was that the milk had not been tampered with.—A fine of 40s. and costs was imposed.

At Edgware Petty Sessions, John Pring, of West-street, Harrow, a dairyman, was summoned for selling milk containing 10 per cent. of added water on the 17th May. Mr. A. M. M. Forbes appeared for the prosecution, and Mr. T. Allingham for the defence. Mr. Watts, Inspector of Food and Drugs, said that he stopped defendant's boy in High-street, and asked him for a pint of milk. At first he said he had none, but witness opened the can and found that he had got some. He then served witness with a pint, and it was divided and analysed in the usual way, with the result that it was declared to contain 10 per cent. of added water. Mr. Edward Bevan, the County Analyst, said he began the analysis almost immediately after the receipt of the sample, but did not complete it until two or three days afterwards. It was necessary to begin it at once so as to prevent any change taking place, but it could be finished later. By Mr. Allingham: There would be about a dessert-spoonful of water in six ounces of milk. Mr. Pring was called and said he saw the cows milked and sent the boy and man on the round. No water was added. There was a heavy thunder shower while the milk was being delivered and the boy got wet through. Neither the man nor the boy had authority to sell the milk to casual customers. He had been in business for 25 years and had never had a complaint. The man and boy also gave

evidence. The Bench dismissed the case, partly on account of the possibility of the rain having got in. Mr. Gilbert said he did not think they should cut at the root of a business which had been honourably carried on for so long a time.

At Westminster on June 23rd., The Union Dairy Company Limited, of 307, Liverpool-road, Islington, were summoned for supplying milk on eight different occasions in Pimlico, from which it was alleged the original fat had been abstracted to degrees varying in the different samples from 14 to 22 per cent.—Mr. Hitchins prosecuted on behalf of the Vestry of St. George's, Hanover-square, and Mr. Ricketts defended.—The Analyst's certificates were not disputed, but Mr. Ricketts contended that the milk was sold as it was received from the farmer, and further that, owing to the unprecedented season, all milk showed a less proportion of cream than was the case in an ordinary season. Further, his clients were protected by a printed warranty, bearing the words "warranted pure, new and unskimmed milk" attached to one of the churns sent to Euston from the dairy farmer in Leicestershire.—After some argument as to whether the warranty affixed to one churn should be taken as covering the milk in the other churns in the same consignment, Mr. De Rutzen held that the warranty was good, and the summonses were dismissed.

At Sleaford Petty Sessions, on the 19th ult., Joseph Bingley was charged with having sold milk adulterated with water. P. C. Ashton stated that he bought a quart of milk of the defendant's lad and told him that it was for analysis. Supt. Richdale said the milk was submitted to Mr. Graham for analysis, who certified that it contained six per cent. water, and that at least 25 per cent. of the original fat had been extracted. Mr. A. L. Jessopp, who appeared on behalf of the defendant, urged that the water had that morning been accidentally added by Bingley, who attended to it because the servant was late. The Bench intimated that the offence might have been somewhat accidental, and they therefore should only impose a fine of £1 and costs.

MORE MAGISTERIAL ENCOURAGEMENT OF FRAUD.

At Gravesend, on the 19th ult., William Elkin, 8, William-street, was summoned for selling milk, from which the cream had been skimmed, for the pure article, on May 24th. Inspector A. H. Lukes said that he visited the defendant's premises and asked for a pint of milk, telling defendant that it was his intention to have it analysed. On the 29th May he received a certificate from the Public Analyst, which stated that the sample sent him consisted of impoverished milk, and was deficient of one-fifth of its cream. The defendant explained that when dipping a measure in the milk, the cream was bound to be reduced. The magistrates did not consider the charge a serious one and fined the accused 2s. 6d. and 18s. 6d. costs.

Samuel Charles Gear, dairyman, was summoned by P. C. Hawkins at Farringdon Police Court, for selling milk on the 24th ult., adulterated with eight per cent. of water. Mr. Wills Chandler appeared for defendant, and totally denied the charge, in support of which he called as witnesses the whole of defendant's employes through whose hands the milk had passed, also the defendant's wife, who served in the shop, all of whom deposed that the milk had not been tampered with. Mr. Chandler contended that in consequence of the drought the cows drank more water than usual and so lowered the quality of the milk. The Bench after considering the case, decided to dismiss the charge, as they considered that possibly the great drought might have had the effect of lowering the quality of the milk.

At Hanley, on the 26th ult., Herbert Clewlow, milk-seller, Market-street, was summoned at the instance of the Corporation for a breach of the Food and Drugs Act by selling milk from which the Borough Analyst certified that 25 per cent. of its cream had been abstracted. Mr. Richardson, who appeared for the defence, stated that the milk had been allowed to stand in a vessel during the period of sale, and that the cream had in that time risen to the surface. Of this the first customers got the advantage, taking more than their fair share of the cream, while the later customers—of whom the prosecutor was one—got milk from which a portion of the cream had by a very simple and natural process been taken away. He contended, however, that there was no fraud on the part of the defendant, and asked that the offence might be dealt with as a merely technical one. The Stipendiary was doubtful whether one-quarter of the cream could have been removed in the way suggested, but said that, even if it were so, there was gross negligence on the part of the defendant. He regarded these cases as defrauding the public, and especially poor people, because it took money from them by false pretences. He fined the defendant £5, and costs.

GIN.

At Heybridge, Essex, John Thomas Wilding, innkeeper, of Heybridge Basin, was summoned for selling a pint of gin to Police-supt. Thomas Gillis, which was below the proper strength. Supt. Gillis produced the report of Mr. Pooley, Public Analyst, which stated that the gin was 40 per cent. under proof, or five degrees below the minimum allowed. A fine of 2s. 6d. and costs 8s. was imposed.

Edwin John Longhurst, landlord of the Cricketers' Inn, West Sussex, was charged at Petersfield Petty Sessions, under the Food and Drugs Act, with selling gin not of the nature and quality demanded.—Sergeant King gave evidence that on May 13th, he went to the Cricketers' Inn, and purchased half a pint of gin, which upon analysis, was found to contain over 50 per cent. of added water, whilst the maximum quantity which should have been added was only 35 per cent.—Mr. E. U. Bullen, barrister, who defended, admitted the offence, but urged that it was due to a mistake. The gin usually sold by defendant over the counter was purchased by him

from the owners of the house in jars, and was of such strength as to admit of being lowered. On the day that P.s. King visited the house the supply of this gin was exhausted, and defendant's wife opened some bottled gin of inferior quality. Defendant, not being aware that this had been done, lowered the strength as usual, and thus brought it below the standard.—A fine of £1 and £1 3s. 6d. costs was imposed.

ANOTHER ABSURD FINE.

At Basingstoke, on the 20th ult., Alfred Gabell, proprietor of the Horse and Jockey Hotel, Hackwood-road, was summoned for selling adulterated gin. Sergeant Hawkins produced the Analyst's certificate, which stated that the gin was 41.76 degrees under proof. Mr. Lamb stated that 35 degrees were allowed by the Act of Parliament, and the difference between that and the 41 degrees was accounted for by the fact that the gin in question had been in cask for three years, and the spirit had evaporated. This was old gin, and the public were being supplied with a really good spirit; in fact the spirits sold at this house were second to none in this town. He was given to understand that gin if kept for a year would lose to the extent of five or six per cent. and in some instances, according to the surroundings, even ten per cent. Mr. Gabell had been a licensed victualler in the town 15 or 16 years, and had never had a similar case under this Act before, and had always done his best to carry on his business to the satisfaction of everybody. He hoped the Bench would take this into consideration and inflict only a nominal penalty. Sergeant Hawkins submitted that the defence was not a valid defence under the Act of Parliament, and drew attention to the Analyst's certificate which stated that water had been added. The Bench inflicted a penalty of 10s. and costs.

WHISKY.

EXTRAORDINARY DECISION.

At Portrush Petty Sessions, Constable Morrison, Inspector of Goods and Drugs, Ballymoney, charged James Fleming, publican, Portrush, with unlawfully selling to the prejudice of the purchaser a quantity of whisky in an adulterated state, on the 20th ult. Mr. P. Boyle, Ballymoney, defended. The Constable stated that on the 20th ult. he called at the public house of the defendant and asked him if there was any whisky in the house, to which he replied that there was, and pulled a bottle off the shelf with half-a-pint in it. He then asked the defendant to divide the whisky into three parts, and put it into three bottles which he produced. He did so, and witness then corked two of the bottles, and was in the act of corking the third, when they entered into a conversation, and witness told him that the whisky was for analysis. Defendant then lifted the two bottles which were corked and smashed them on the floor. Witness lifted the third bottle, containing about a glass and a half, and paid him sixpence for it. He then went to the barracks and took a witness with him to the defendant's house. He asked defendant where the broken portions of the bottles were, and he replied that they were in the yard. He and Sergeant Wheatley, who accompanied him went out into the yard, but the defendant declined to point out the broken bottles. He afterwards found the broken pieces (produced) in the ashpit. Witness then went into the shop, accompanied by Sergeant Wheatley, and divided the portion remaining in the third bottle into three parts, retaining in the bottle for analysis about a glass. He produced the certificate of the County Analyst, Dr. Hodges, Belfast, who stated that the whisky submitted to him was thirteen degrees below the standard. This whisky was sold by the merchants to the defendant at twenty-five degrees below proof, so that according to the analysis the defendant had reduced it to thirty-eight degrees below proof. To Mr. Boyle.—He had never known the defendant before, and was not aware if there had been any previous charge against him. He was not in plain clothes when he asked for the whisky. The defendant did not refuse you the whisky, or obstruct you in any way from getting it? He obstructed me in every possible way. Yes, but he gave you the bottle? I saw the bottle on the shelf, and he handed it to me for inspection. Do you swear that after giving you the whisky for analysis he turned and broke the bottle on the shelf? Certainly. You had not offered him money at that time? I had not, but it was on my making known the purpose of my visit that he broke the bottles. Was it not because you had not paid for the whisky that he took the bottles from you, and on putting them down on the shelf they were broken? Oh, he put that forward as an excuse that he wanted to be paid for the whisky. Do you swear that he broke them intentionally? I swear that he broke them to frustrate the analysis. Was there not part of the liquor that was in the broken bottles saved by him and put in a glass? There was not. Witness added that he sealed the unbroken bottle in the defendant's presence, and gave him 6d. for it before he went to the barracks, and it might be half-an-hour or an hour before he returned, accompanied by Sergeant Wheatley. He wanted to have Sergeant Wheatley present as a witness, seeing the sort of man he had to deal with, to be present at the search for the broken bottles, and at the division of the whisky. Now this occurred on the 20th May, and Dr. Hodges certifies that he received the sample on the 30th. Did you keep it for ten days after the occurrence? I had other samples to attend to. Did you get a sample of whisky in M'Atamney's after you left Fleming's? I did. When you went back with Sergeant Wheatley did the defendant protest that the whisky you had was not his? He expressed a doubt as to it being the same, and said the colour was different, but it was after that that I bought the sample in M'Atamney's. Do you swear that you told the defendant that you came for the purpose of obtaining a sample for the Public Analyst? I don't think I told him my business until the bottles were corked. I then remarked that I wanted the whisky for analysis. Sergeant Wheatley corroborated.

When he went into the defendant's shop in company with the plaintiff, he asked the defendant why he had broken the bottles and obstructed the constable in the discharge of his duty, and he replied that he did not deliberately break the bottles but that on putting them down on a shelf behind him they were accidentally broken. Complainant said Mr. Boyle had tried to make it appear that the defendant had retained portion of the whisky which was in the broken bottles. The fragments (produced) were not likely vessels to retain whisky. Mr. Boyle said before going into the defence there was a technical point which he wished to raise. He had pressed the constable strongly in regard to the words he had made use of at the time he had bought the whisky and he had stated that it was for analysis. Now according to the 14th section of the Sale of Food and Drugs Act (which he read) it was necessary at the purchase to state that the article was for analysis by the County and Public Analyst. There was a case decided on the point, to which he would refer them—the case of Barnes v. Chipp, in which a constable had stated that the whisky was for analysis, but did not add “by the County Analyst” and the conviction was quashed on that point. On the evidence of the constable then, the law had not been strictly complied with. Captain Gage—If this case rules it, I am afraid that the prosecution drops. The Chairman—According to that the constable should have stated that the whisky was for analysis by the Public or County Analyst. Captain Gage said it was a very great technicality. The Chairman (to complainant)—You left out the words, “by the County Analyst.” Complainant—It has never been brought under my notice before. Captain Gage said this was one of the points that was sprung on them unawares. He thought it was a very good point, and that the prosecution must fail. Mr. Huey—It shows that Mr. Boyle is up to his business well. Captain Gage—This point has been sprung on Constable Morrison, and perhaps Mr. Boyle did not know of it until he looked it up. (Laughter.) Mr. Boyle—It is an extraordinary decision. Captain Gage—It shows we should take nothing for granted. The case was dismissed without prejudice. Captain Gage, addressing the defendant, said his conduct was not what it ought to be as a publican. He had no right to smash the bottles. The court then rose.

AGRICULTURAL IMPORTS.

Account shewing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended July 1st, 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities.	
		1892.	1893.
Animals living:—			
Oxen, bulls, cows, and calves	Number	12,013	8,798
Sheep and lambs	“	494	626
Swine	“	492	—
Fresh meat:—			
Beef	Cwts.	37,199	27,382
Mutton	“	97,366	45,535
Pork	“	496	864
Salted or preserved meat:—			
Bacon	“	92,779	60,410
Beef	“	8,382	1,564
Hams	“	24,008	19,455
Pork	“	6,146	4,324
Meat unenumerated, salted and fresh	“	2,268	1,629
Meat preserved, otherwise than by salting	“	18,761	21,667
Dairy produce and substitutes:—			
Butter	“	44,787	42,525
Margarine	“	21,181	23,986
Cheese	“	76,012	76,462
Condensed milk	“	8,797	4,921
Eggs	Gt. Hundr.	193,740	244,856
Poultry and Game	Value £	2,203	1,823
Rabbits, dead (not tinned)	Cwts.	18	48
Lard	“	10,960	21,946
Corn, Grain, Meal and Flour:—			
Wheat	“	1,947,877	2,329,998
Wheat Meal and Flour	“	409,882	377,906
Barley	“	162,153	125,548
Oats	“	934,384	258,453
Pease	“	51,340	80,985
Beans	“	100,269	99,459
Maize or Indian Corn	“	1,073,853	632,968
Fruit, Raw:—			
Apples	Bush.	2,088	13,190
Oranges	“	86,590	7,952
Lemons	“	—	32,183
Cherries	“	27,917	26,410
Plums	“	951	26,775
Pears	“	19	5,896
Grapes	“	782	1,982
Unenumerated	“	36,194	47,977
Hops	Cwts.	285	3,419
Vegetables:—			
Onions, raw	Bush.	34,063	52,151
Potatoes	Cwts.	284,867	156,405
Unenumerated	Value £	37,502	36,668

* Not separated in 1892

Statistical Office, Custom House, } T. J. PITTAR.
London, July 8rd, 1893.

CORRESPONDENCE.

To the EDITOR of FOOD AND SANITATION.

DEAR SIR,—In your issue of June 24th, page 174, under the heading of meat prosecutions, you report a case where you quote the Defendant as saying “that he had just come from Eastmans.”

We will be glad if in your next issue you will contradict this. The Defendant had never been to our shop, nor had he any connection with us in any way whatever. There is not a word of truth in the statement.

We are, yours truly,

Queen Insurance Buildings,
Dale-street, Liverpool.
1st July, 1893.

EASTMANS, LIMITED.
per R. Hall.

The following is extracted from "THE ANALYST," for March, 1893.

"THE COMPOSITION OF MILK AND MILK PRODUCTS.

25,931 SAMPLES were Analysed in 1892, in the LABORATORY of the

AYLESBURY DAIRY COMPANY, LTD.,

St. Petersburg Place, Bayswater, London, by M. H. Droop Richmond, F.I.C., F.C.S.,
Member of the Society of Public Analysts, the Company's Resident Analyst.

The Samples comprised:—

23,865 of MILK, 566 of CREAM, 8 of BUTTER-MILK, 78 of BUTTER,
24 of WATER, and 22 of SUNDRIES."

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from MALT and BARLEY only—without the addition of RICE, MOLASSES or SUGAR—and that no description of ACID is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.

IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

We guarantee our Lard to be perfectly free from water or any other adulteration. We only make ONE quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.

Chafed Skin, Piles, Scalds, Chilblains,
Chapped Hands, Neuralgic and Rheumatic Pains,
Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites
or Stings, Throat Colds, and Skin Ailments

QUICKLY RELIEVED BY USE OF

CALVERT'S CARBOLIC OINTMENT,

Large Pots, 13½d. each, with full Instructions.

Court Circular says: "We cannot too highly recommend Calvert's Ointment. It is the best general Ointment with which we are familiar, and ought to be a stock remedy in every household."

Private report from Limassol Cyprus: "I have never found anything to come up to it for neuralgic 'Rheumatic Pains.'"

Samples sent Free by Post on receipt of value.

F. C. CALVERT & CO., MANCHESTER.

Awarded 60 Gold and Silver Medals and Diplomas.

"SANITAS" DISINFECTANTS

Unlike most disinfectants—such as the Coal Tar products—do not rob the air of its vital Oxygen (so essential to animal life), nor merely hide the foul smells of decomposition by their own odour; they actually generate Oxygen in an active form, and destroy offensive matters and disease germs. Moreover, the "SANITAS" Disinfectants are non-poisonous, do not stain, are pleasant in use, and natural in character.

Apart from the important consideration that the "SANITAS" Disinfectants have emanated from a well-known chemist (Mr. C. T. KINGZETT, F.I.C., F.C.S.), they have received testimony from Sir CHARLES CAMERON, M.D., F.R.C.S.I., F.I.C., &c.; Professor T. E. Thorpe, F.R.S., F.I.C., F.C.S.; H. W. RICHARDSON, M.D., F.R.S.; A. B. GRIFFITHS, Ph.D., F.R.S.E., F.C.S.; R. H. HARLAND, F.I.C., F.C.S.; J. B. YNNE, F.I.C., F.C.S.; T. PALMER, B. Sc., F.C.S.; and innumerable other Chemical and Medical Authorities; and have received the approval in use of most of the Medical Officers of Health in the United Kingdom.

Pamphlets, fully descriptive of all these manufactures, may be obtained free on application to

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LONDON, E.**

C. T. KINGZETT, F.I.C., F.C.S.,

Author of "Animal Chemistry" (Longmans and Co.); "The Alkali Trade" (Longmans and Co.); and "Natures Hygiene" (Baillière and Co.); &c.
Managing Director and Chemist.

Food and Sanitation.

SATURDAY, JULY 15, 1893.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

IRISH AUTHORITIES, INSPECTORS, AND THE ADULTERATION ACTS.

ONE of the healthiest signs in relation to Irish industrial development is that the ill-repute into which Irish butter had fallen has been within the past year removed in a considerable degree, and it is now evident that if Irish authorities zealously do their duty, the prejudice yet existing in some quarters will disappear altogether, and Irish butter again occupy a deserved position in the forefront of the butters of the world. We have fought hard to bring this about by putting in force the Adulteration Acts, arousing local authorities throughout the United Kingdom to practical work for benefitting native industries, and urging the prosecution of the water in butter swindler and the margarine and butter blending thieves, whose rascalities have been such powerful factors in damaging the Irish butter trade. All who have at heart the development of native industries are agreed how shameful it is that the shortsighted, unprincipled greed of a few farmers or factors should have an unchecked career, to the ruin of a great national industry. Yet this in effect has been the case in Ireland amongst all parties and classes. We have evidence that the worst of such enemies of Irish industries have even been Members of Parliament, who have loudly proclaimed how fervent and lofty was their love of country. To our

thinking it is a contemptible and bastardised kind of patriotism that enables any so-called hon. gentleman to pose as a patriot in Parliament whilst he is amassing wealth by importing green American lardy bacon, and smoking, branding and vending it as Irish, or selling water at the price of butter. One might almost doubt that such hypocrisy could exist were it not too painfully true. It behoves therefore Irish authorities to grapple with the butter and bacon frauds in real earnest, and set themselves strenuously to work to purge the Irish provision trade of the rascality of excess water, margarine mixing, and false branding, that have so deeply injured it. It is only thus that the Irish butter trade can be raised and maintained in a pre-eminent position. We have striven our utmost to give fair play to Irish and English industries, desiring as we do that English and Irish butter, bacon, etc., should be produced in abundance and with profit, rather than English gold should pour into Brittany, Denmark, Saxony, America, or even to our kin beyond the sea, for produce that could be grown at home. It was with this aim that our Journal was founded, and it is for this purpose we now address ourselves to Irish local authorities, grand juries, &c. The Irish Constabulary have in many districts placed their services at the disposal of local authorities for enforcing the sale of Food and Drugs Acts, the Margarine Acts,—and we hope, also the Merchandise Marks Acts. In every issue of our Journal are recorded instances of their meritorious activity, but in too many cases their efforts to check or punish fraud fail, for a very obvious reason. *They have had no experience of the Acts and of the myriad of devices by which swindlers may drive a coach and four through them. The procedure necessary for taking samples or conducting prosecutions is unknown to them.* The difficulties bestrewing their path are well explained in the following letter from a zealous Inspector of Food and Drugs belonging to the Royal Irish Constabulary. "In this country," says this correspondent, "save in a few places, nothing has been done under the Food and Drugs Acts, and all those Sergeants of Constabulary recently appointed know practically nothing of the working of the Act, of the many technical points connected with samples, or of the legal points, and have never ventured farther than samples of whisky or milk, and in some cases a few other articles. The Local Authorities in this country give us scant encouragement. *They have our services free, and it would be little enough recognition were they to supply us with your paper for our guidance.* As things now are, we have to meet in almost every case solicitors up in the latest tips, whilst we are only feeling our way: hence the many failures in cases. In Ireland (save in the cities, which are few) the Grand Juries are the authorities for carrying out the Adulteration Acts. These bodies should know how important your Journal is to us as Inspectors and for the public protection, and ought not to ask us to be at the expense of purchasing your Journal individually, but should order it for us like Local Authorities do in England for their Inspectors. However anxious we are to enforce the Acts in the interests of the Irish butter trade, we have nothing to guide us unless we buy expensive legal works, which, if we buy them, do not give us the latest decisions, appeals, etc., that your Journal gives." It would really appear from this letter that Irish Food and Drugs Act Inspectors are expected to make bricks without straw, and a case in point, showing the justice of the above complaint, has just reached us from Enniskillen. We take the report from the *Fermanagh Times* of July 6th:—

"At Derrygonnelly, on June 30th, before James Gordon, Esq., J.P., Sergeant Hannon summoned David Donaldson, Derrygonnelly, for offering for sale butter alleged to be adulterated. Mr. G. A. Bird appeared for the defence. Sergeant Hannon deposed that on the 17th May last he took specimens of butter from all the merchants selling it in Derrygonnelly. Took eighteen ounces from defendant. Professor Cameron, certified that there was 20 per cent. fatty matter in defendant's butter. To Mr. Bird: Did not tell defendant what was wanted with the butter. Mr. Bird: You are out of court, sir. Sergeant: I told him after I bought it. Mr. Bird: Ah! just so. You have learned the law now and you want to trump up a case. Sergeant: I do not. Mr. Bird: Well, indeed you do. I would ask the Court to dismiss the case. Defendant: I bought the butter in the usual way, across my counter, and it appeared good. His Worship dismissed the case."

In this instance the Analyst's certificate proved adulteration, but owing to an error in procedure the case was dismissed. Another case recorded in the *Cork Examiner*, of July 7th, is equally instructive, and shows how, by legal quibbles, justice may be defeated to the injury of the Irish creamery movement:—

"At Kildorrery Petty Sessions, before Mr. Henry C. Burren, B.L., J.P., Michael Roche, farmer, was summoned by Sergeant John Kelly with unlawfully selling milk adulterated with water, on the 17th June, 1893, to William Gates, manager West Surrey Central Dairy Company, and also to the complainant. Mr. A. Carroll, solicitor, Fermoy, appeared for the defendant. Sergeant Kelly deposed that on the date stated, he, acting as Inspector under the Food and Drugs Act, 1876, purchased a small quantity of milk from a boy in the employment of the defendant. He sent the milk to the County Analyst, and received the certificate of the Analyst (which he handed to the Court), which set out that the milk in the opinion of

the Analyst contained some water. Cross-examined by Mr. Carroll—He only purchased less than half a pint from the boy. He offered to give some of the half pint to the boy, but he refused to take it. He did not receive any of the milk back from the Analyst, only the certificate. The Sergeant submitted that he was entitled to a conviction. Mr. Carroll argued that the Bench could not convict as the requirements of the Act of Parliament were not complied with. The Food and Drugs Act, sec. 15, provided "That if the seller or his agent do not accept the offer of the purchaser (the sergeant in this case) to divide the articles purchased, the Analyst receiving the articles for analysis shall divide the same into two parts, and shall seal or fasten up one of these parts and shall cause it to be delivered either upon receipt of the sample or when he supplies his certificate to the purchaser, who shall retain the same for production in case proceedings shall afterwards be taken in the matter." Mr. Carroll submitted that in the evidence of the sergeant the Analyst had omitted to return any portion of the sample, and the prosecution must fail. He (Mr. Carroll) thought it would be difficult for the Analyst to return a portion of the sample, the quantity sent being so small. The defendant was prepared to meet the case on the merits, but there was no necessity for calling evidence until the case was properly brought. His Worship, in giving judgment, said the requirements of the Act were not complied with. The sergeant had done his duty, but the Analyst should, in his opinion, return with the certificate a portion of the milk to be produced in court, and he dismissed the case."

London Vestries, Provincial Corporations throughout England, and local authorities generally, take steps to supply their officials with our journal whereby they guard themselves against failures of justice like those recorded above. The Gloucester Constabulary Inspectors, for instance, are each supplied with a weekly copy of *FOOD AND SANITATION*, the authorities there showing the following enlightened example:—

"From Supt. J. Matthews, Fishponds, near Bristol.

To the Publisher of *FOOD AND SANITATION*.

"Please forward to L-wford's-gate Prison, Bristol, 20 copies weekly of *FOOD AND SANITATION*."

The Chief Constable of Cumberland and Westmoreland, J. Dunne, Esq., similarly supplies the Superintendents in his district with copies. Writing from Carlisle, Mr. Dunne says:—

To the Publisher *FOOD AND SANITATION*.

"Sir,—As your paper contains a good deal of information that is of great value to the Inspectors, I shall feel obliged if you will supply to the undermentioned ten Officers one copy each by post weekly."

Throughout England, Scotland and Wales, the local authorities act similarly, realising more and more how important it is in the interest of the public, of agriculturists, and native industries, not only that the acts should be enforced, but that the officials entrusted with their execution should be thoroughly posted as to each kind of fraud, and able to meet and defeat legal chicanery. Irish trade more than any other has been damaged by adulteration and it is scarcely creditable to the authorities concerned that they give such scant encouragement to the Inspectors concerned with the working of the Acts, the more so as the thorough enforcement of the Food and Drugs, and Margarine Acts, would be of such enormous benefit to Irish industries, and would save the people of the United Kingdom millions of pounds yearly, now filched from them by free fraud, and flowing into the coffers of Hamburg, French, Italian, and other foreign swindlers, for produce that, in addition to being adulterated, may at any moment be the means of bringing the dread scourge of cholera to our cities, towns, and villages.

ANNOTATIONS.

THE POTTED MEAT POISONING AT PRESTON.

INQUEST ON THE VICTIM.

On July 4th, Dr. Gilbertson held an inquest at the Ship Inn, Fylde-road, Preston, on the body of Mary Jane Miller, aged eight years, the daughter of William Miller, painter, of 7, Heysham-street, who, it was stated, had died from eating potted meat. William Miller, the father, and others having given evidence, Dr. D. W. Brown said his assistant, Dr. Dingal, attended the family, and found them all prostrate from vomiting and pain at the stomach. He considered they were suffering from some irritant poison, and administered remedies accordingly. Dr. J. Brown, who had made a post-mortem examination of the body, was of opinion that the cause of death was irritant poisoning, arising from partaking of meat which he had no doubt had been kept too long, and was decomposed. Two of the children were improving, but one of the others, and the aunt, were still very ill. The jury returned a verdict of "Poisoned by misadventure."

IMPRISONED FOR EXPOSING BAD FISH.

At Leigh, on July 3rd, Patrick Mitchell, fishdealer, of Ince, near Wigan, was sent to jail for 21 days for exposing fish unfit for human food in the Leigh Market-place on the 25th of last month. The Magistrates expressed an opinion that a fine would not meet the case, and that defendant had got off very lightly. The fish was in a state of putrefaction.

THE FOOD SUPPLY OF BLACKPOOL.

A Daniel has come to judgment on the Blackpool Food Supply, but his judgment is discounted by the fact that he is one of that class of traders whose octopus proclivities are crushing the individual grocer out of existence, and to whom the chance of gratis puff advertisement is as dear as the breath of their nostrils. The blend of advertisement, self-laudation and simulated indignation in the following amuses us a little, but disgusts us more. Daniel's object was plainly to improve the occasion in the *Blackpool Herald* for himself, his butter, and his sixty shops. Quoth the free puff hunting, sixty-shopped, "Every tub guaranteed pure" Daniel: "My attention has been drawn to an article in last Tuesday's issue of the *Manchester Evening News* which had escaped my notice at the time, dealing with charges made by a journal, styled *Food and Sanitation*, against the tradesmen of Blackpool. It is a scurrilous thing to say that at this popular summer resort margarine is sold as butter, and it is absolutely devoid of truth so far as the respectable tradesmen of the town are concerned; and when it is further stated that filthy margarine is palmed off upon buyers as fresh and pure butter, I protest most strongly against such an assertion, as being both false and stupid. I am only sorry to say that it is too true that in many places all over the country margarine is sold by unscrupulous tradesmen as butter, but speaking for ourselves as extensive importers and dealers in pure butter, and having a branch at Blackpool, in addition to nearly sixty others, we take care to have every tub of butter guaranteed pure, and we are always pleased to give a similar guarantee to customers, if desired. It is a most scandalous thing that writers and journals should be allowed to make and publish such dastardly and cowardly attacks upon tradesmen whose *bona fides* are unquestionable. Such conduct is calculated to do a serious amount of injury to the town itself if allowed to pass without comment.

"Travelling recently, as I have done, for the benefit of my health, about southern watering places, I have no hesitation in stating that prices are on an average from 10 to 15 per cent. higher than those charged by Blackpool tradesmen for the very same class of goods.

"Thanking you in anticipation for the insertion of this letter, faithfully yours,
"DANIEL MELIA."

The indurated immensity of the superficialities of thy cuticle, Daniel, likes us. "All over the country, "Daniel," margarine is sold by unscrupulous tradesmen as butter, "Daniel," but not in Blackpool, Daniel, of course not! How could such a thing occur in Blackpool, Daniel? Well, Daniel! thy sort of frothy bunkum may tickle Blackpool gudgeons, but 'tis shoddy, Daniel, and that of the sorriest, and it doubts us that even Blackpudlians will thank thee for it, for dost thou not say, Daniel, that prices in southern watering-places are on an average from 10 to 15 per cent. higher than those charged by Blackpool tradesmen, Daniel, and thus write the Blackpool tradesman down an ass, Daniel? Now, Daniel, the Blackpool tradesman, with, of course, gilt-edged exceptions like thyself, Daniel, is not an ass whatever else he may be, and to this degree, at least, it behoves us, Daniel, to speak in his defence.

MR. PLUNKETT'S MARGARINE BILL.

A deputation of Members of Parliament and others interested in the question is shortly to wait on the President of the Board of Agriculture in support of Mr. H. Plunkett's Margarine Act and Sale of Food and Drugs Act Amendment Bill. Mr. Maclure has given notice to move the rejection of the Bill.

FULHAM—ITS SUMMONSES AND ITS ANALYST.

The Fulham Sanitary Committee reported at their last meeting:—"We are informed that a summons against a Mr. James Pearson, under the Sale of Food and Drugs Act, for adulteration of milk, had to be withdrawn owing to the summons not having been served within the time prescribed by law. It appears that several summonses under the Act referred to were delivered at the West London Police-court for service on the 20th May last, and with the exception of the one in question were all served within the specified time. Mr. Pearson's summons, however, was not served until the 26th May last, two days after time, although the defendant's place of business is situated in the North-end-road, within a few minutes walk of the Court. Under these circumstances we have instructed the Clerk to the Vestry to call the attention of the Magistrate before whom this case came to the delay on the part of the Court Officials in serving this summons. A number of samples were submitted to the Analyst on the 27th April last; he certified as to their quality on the 19th May last. We consider that rather too much time elapsed between the receipt of the samples by the Analyst and his report on them, and we have therefore instructed the Clerk to the Vestry to communicate with the Analyst, asking him to report for the future as early as possible after the receipt of the samples.

THE INTERNATIONAL UNION FOR THE SUPPRESSION OF ADULTERATION.

In the House of Lords on July 4th, the Duke of St. Albans asked her Majesty's Government whether the Danish Government had proposed a conference with the view of framing a convention to deal with the international trade in adulterated butter; and whether there was any objection to lay the papers on the table. He wished to protest against the doctrine that had been laid down by the noble lord who represented the Board of Trade in their lordships' House that a free country could not interfere with the importation of adulterated food stuff provided it was healthy and pleasant. He denied that the demand for restricting the importation of adulterated butter was one for protection under an *alias*, and that commercial freedom meant that butter should be imported from Hamburg adulterated with 20 per cent. of water. Irish farmers had been convicted at Cork in August last for sending butter so adulterated to market. It was unfair to the British farmer and to the honest foreign producer that they should be handicapped in the present competition by the profit arising out of fraudulent adulteration of foreign butter. It was unjust to the consumers that they should be exposed to the risk of paying for real butter and obtaining a fraudulent substitute. It was also unjust to the retailers that they might be convicted for innocently selling such adulterated butter as genuine. Under these circumstances he trusted that her Majesty's Government would favourably consider the proposal which had been made by the Danish Government that an international convention should be appointed for the purpose of checking this fraudulent trade. (Hear, hear.) The Earl of Rosebery said that his part in this matter was a very small one—namely, to explain that a proposal for the appointment of an international convention was made by the Danish Government—but owing to the doubts expressed by the Board of Agriculture, the Board of Trade, and the Local Government Board, her Majesty's Government did not agree to the proposal. (Hear, hear.) Inasmuch as negotiations on the subject were still proceeding, it would not be right for him to lay the papers asked for upon the table of the House. The noble earl behind him would answer the question as far as it concerned the Board of Agriculture. (Hear, hear.) The Earl of Feversham expressed a hope that the Board of Agriculture would look into the matter and see whether something could not be done to check this fraudulent trade. (Hear, hear.) Lord Ribblesdale said that the Board of Agriculture had considered the question from the point of view of the producer and not of the consumer or distributor. He thought that the consumer and distributor were in capable hands under the Board of Trade. The Board of Agriculture thought the end in view could be much better secured by Parliament than by the philosophic and scientific inquiry recommended, but they would be glad if the Danish Government made a practical suggestion on the subject, and they would see how far they could embody it in a Bill. Lord Belper was very glad to hear the statement of the noble lord, but feared that no legislation would be of avail unless her Majesty's Government were prepared to enforce it against adulterated butter entering this country from abroad.

On July 10th, Mr. John Ellis, M.P., asked the Under-Secretary for Foreign Affairs whether a proposal had been received from the Danish Government for the meeting of a conference with a view of dealing with the international trade that now existed in adulterated butter; and what course the Government proposed to take in the matter. Sir E. Grey replied: The Danish Government have made such a proposal, and, after consultation with the various departments concerned, a reply has been returned to the effect that her Majesty's Government would not feel justified in taking the initiative in the international action proposed, but will be glad to consider any further practical suggestions which the Danish Government may have to make.

PREVENTING MEAT POISONING.

At Lambeth, on July 11th, a Sanitary Inspector of the Lambeth Vestry applied for an order for the destruction of a quantity of unwholesome meat, which he had seized at a shop in Railton-road, Brixton. The Inspector stated that he found a quantity of putrid pork, mutton, and beef exposed for sale. In the rear premises he found about 13st. of unwholesome meat in a brine-tub, and on the chopping-board there was about 2st. of beef and mutton, which was also in a stinking condition. Mr. Biron made an order for the destruction of the meat, and granted a summons against the shopkeeper.

It will be interesting to note what Mr. Biron will do with this "block ornaments" and "bags of mystery" gentleman. We are becoming very tired of recording 10s. fines for this abominable class of offence.

THE FERTILIZERS AND FEEDING STUFFS BILL.

This Bill was read a second time on July 11th, and was referred to the Standing Committee on Trade and Agriculture.

THE SOMERSET HOUSE ANALYTICAL DEPARTMENT.

The *Glasgow Herald*, July 7th, says: I hear from Somerset House that the Committee which is inquiring into the administration of Government laboratories, and of which Mr. Roberts-Austen, the Assayer at the Mint, is chairman, is about to visit Edinburgh and Glasgow, in order to inspect the establishments in these cities. The inquiry was originally brought about by the dispute between the Society of Analysts and Dr. Bell, the Somerset House chemist, but its scope was subsequently extended, and the whole system of testing for revenue purposes, as well as examination under the Food and Drugs Acts, is being investigated.

ADULTERATION PROSECUTIONS.

REFUSING TO SELL FOR ANALYSIS IN IRELAND.

IMPORTANT BUTTER APPEAL CASE.

At Dublin, on June 28th, the Judges of the Court of Queen's Bench, heard an important appeal case under the Food and Drugs Act. The presiding Judges were—Justices Harrison, Fitzgibbon, and Johnson.

Sergeant John M'Hugh, Ennis, appealed against the decision of Mr. Hodder, R.M., at Ennis, in a case brought under the Food and Drugs Act, against a farmer named Timothy Magrath, for refusing to sell appellant a sample of butter from a firkin respondent had for sale at Ennis market, and in which Mr. Hodder held that the 17th section of the Act did not bind a farmer selling butter by wholesale in the market to give a sample. At the instance of the South of Ireland Butter Merchants' Association a case was stated, which came on for argument before the Court of Queen's Bench. The Judges unanimously decided to send back the case to Mr. Hodder, with an intimation he was not correct in his finding. The Judges hold that the 17th section of the Food and Drugs Act applies to both wholesale and retail dealers. Counsel for appellant—Messrs. Wright, D. B. Sullivan, Q.C., and Browne (instructed by Mr. P. S. Connolly, solicitor, Limerick.)

IMPORTANT POINT FOR FOOD AND DRUG INSPECTORS.

At the Kilrush Petty Sessions, on June 26th, before Mr. A. M. Harper, R.M., presiding, Mr. J. Culligan, and Counsellor Brew, the decision in the prosecution by Inspector Keane, R.I.C., under the Food and Drugs Act, against Thomas Reidy, Balinagun, which had been overhauled from a previous sessions was announced by Counsellor Brew. The summons was for offering butter in the local market, which on analysis was found to contain an excessive quantity of water, sufficient to cause adulteration. Counsellor Brew reviewed the evidence given at much length, and remarked that as the case was brought under a penal section, involving in case of conviction a very heavy fine, he had taken some trouble in considering it. It was a prosecution of much public importance, and many difficult points had been raised, which demanded close attention. He would now briefly refer to the points raised by Mr. Hilliard for the defence, which he would deal with *vice versa* to the order in which they were made. First, as to Mr. Hilliard's contention—that the defendant, Thomas Reidy, was not responsible for the sale of the butter on the occasion, he held the objection not tenable, as in his opinion Mrs. Reidy was clearly acting as her husband's agent. The second point raised that no offence had been disclosed in the evidence having regard to sub-sec 6. that the constable had been supplied with what he demanded was argued very ably, and Mr. Hilliard relied on the reported case of Lane v. Collins as set out in the standard law reports. That case no doubt had been rightly decided, but on reflection he thought it was not relevant to the issue in the present prosecution. Then, as to the third point raised, when the appointment of the Inspector by the Grand Jury had been impugned, he had looked carefully into Taylor on evidence, and he came to the conclusion that the mere production of a document signed by the sec. to the Grand Jury, was not sufficient evidence in itself of the appointment. On this alone he would be disposed to dismiss the case without prejudice, but another point arose, which appeared to have escaped Mr. Hilliard's notice. It was that the Inspector had not fully complied with sec. 14, which required "That at the time of purchase clear notification should have been given by the Inspector to the seller or agent of his intention to get the article analysed by the Public Analyst." Bell's Food and Drugs Act, which contained many valuable foot notes, was quite clear on this point. In the notes he took of the Inspector's evidence, which he found to be correct, he stated merely "that he wanted the sample to send it for analysis to Dr. Cameron," but he omitted to specially indicate that Dr. Cameron was the Public Analyst for the county. Having regard to the judgment in the case of Barrett v. Ship, which came exactly under the 14th Section, he was of opinion that the omission was a fatal one and that on that ground alone the summons should be dismissed, and dismissed on the merits. There were other points too, which arose, but he did not think them important enough to necessarily demand reference. Mr. Hilliard thanked Counsellor Brew for the pains he had gone to, to inquire into the case, and for the very valuable and elaborate judgment he had delivered. The Chairman pointed out that Mr. Hilliard's point as to the appointment of the Inspector by the Grand Jury was last week overruled by Judge Kelly on an appeal from the Ennistown magistrates. Probably Counsellor Brew might have been unaware of that. Counsellor Brew: On that point I would have been disposed to dismiss the case without prejudice. Mr. Hilliard remarked he would attach more importance to Counsellor Brew's decision, inasmuch as he had carefully studied the various authorities bearing on the case, while Judge Kelly at most had given an off-hand judgment in the appeals.

GIN.

At Aylesbury Petty Sessions, George Charles Martin, of Cuddington, was summoned for selling gin adulterated with water. Defendant pleaded guilty. The certificate of Mr. Fisher, Public Analyst, stated the gin was 13 degrees below the limit allowed by Act of Parliament, and 48 degrees below proof. Defendant said that Cuddington was a very dull place, and he had kept the gin a long time. It had deteriorated through being kept a long time in a small quantity. Fined 6d., and 22s. 6d. costs.

VINEGAR.

William Capes, grocer, Anlaby, was summoned for an offence under the Food and Drugs Act. Superintendent Harvey said that on the 13th June last, he caused a pint of vinegar to be purchased from the defendant, a third of which he submitted to Mr. Baynes, the Analyst for the Riding. That gentleman reported that the fluid submitted to him was not vinegar at all, but consisted of acetic acid, diluted and coloured. Defendant said that he purchased the stuff from an agent in Hull, and fully believed that it was vinegar. None of his customers had ever complained about it. The chairman said that if the defendant had been deceived the Bench were sorry, and he had his own remedy, but they must inflict a fine of 5s. and the costs.

SWEET SPIRITS OF NITRE.

At the Nuneaton Petty Sessions, on June 29th, F. W. Parkinson, chemist, Atherstone, was summoned under the Food and Drugs Act, for selling sweet spirits of nitre which was 30 per cent. of ethyl nitre under proof. On behalf of the County Council, Mr. J. H. Bland, Nuneaton, prosecuted, and Mr. H. Glaiyer, Birmingham, defended. Dr. Bostock Hill, County Analyst, proved the analysis. He said that, according to the British Pharmacopoeia of 1885, it should, when treated, yield seven times, or not less than five times, of its volume of nitric oxide gas. The sample did not comply with the requirements, as it only yielded 3·3 times its volume of gas. Without the ethyl nitrite the drug would be nothing but alcohol and water, with perhaps a trace of acid. In such a case the consensus of medical opinion was that the drug was valueless. In cross-examination, Dr. Hill said the percentage of ethyl nitrate was 1·24. He found no methyl. He denied that there were two preparations known to the public and the trade as sweet spirits of nitre and spirit of ether. It was necessary that ethyl nitrate should be present, as the drug was used for the purpose of production of perspiration. Mr. Glaisyer contended there were two preparations, and that there was no authority for holding that the new had entirely superseded the old. The article supplied was genuine sweet spirits of nitre, and there was no pretence that it was spirit of nitrous ether. Dr. Bostock Hill said the drug contained 1·24 per cent. of ethyl nitrite, whereas it should have contained at least 2 per cent. There was no such official substance as Mr. Glaisyer suggested. Mr. Parkinson said the drug was sold in the same state as he received it. Samuel Bertles, assistant, corroborated. After other witnesses had been examined, the Bench dismissed the case. Mr. Glaisyer made application for costs. The defendant, he said, had been put to a deal of expense and trouble. The Bench allowed £3. and Mr. Tyre, the Chairman, said that it was perfectly clear there had been no fraud to the public.

COFFEE.

At Liverpool, on July 5th, William McCulloch, grocer, 70, Regent-street, was summoned for selling as coffee a mixture of chicory and coffee.—Inspector Baker stated that he sent a man to purchase a quarter of a pound of coffee. Defendant's assistant weighed out the mixture, and in handing it over the counter observed, "There is chicory in it." The analysis showed that there was 45 per cent. of chicory in the coffee.—A fine of 40s. and costs was imposed.

At the Borough Police-court, Southampton, on June 30th, Caleb Guy, grocer, St. Mary's-street, was charged with selling coffee adulterated with chicory. Mr. Keele appeared for the prosecution, and Mr. Gilman defended. The offence was admitted, and Mr. Gilman said it was purely a mistake on the part of the assistant. Two kinds were kept in the shop. Mr. Keele said that Mr. Brierley had sent the sample to another Analyst, who sent it back saying that the presence of chicory was so apparent that he was surprised Mr. Brierley sent it for confirmation. The certificate showed that there was 66 per cent. of coffee and 34 per cent. of chicory. A fine of 40s., with £3 3s. costs, was inflicted.—Henry Edmund Barnes, of Lower Canal-walk, pleaded guilty to a similar offence. The certificate in this case showed that the mixture supplied as pure coffee consisted of 46 per cent. of coffee and 54 per cent. of chicory. Defendant said he did not profess to sell pure coffee, and it was a mistake on the part of his daughter to serve it. The Bench inflicted a fine of 40s. and 11s. 6d. cost. Chief Sanitary Inspector Amor and Inspector Powell appeared in support of the charges.

At Worcester County Petty Sessions, on June 28th, Robert Ernest Dwight, grocer, Martley, was summoned for selling coffee which was adulterated with chicory, on May 19. Sergeant Walker produced the certificate of the Analyst, which showed that the coffee contained 50 per cent. of chicory. The defendant said he bought the coffee as a mixture, and intended to sell it as such. He had only been in the business about seven weeks, and would take care that he did not offend again. Sergeant Walker said he was authorised by the Chief Constable to say that, as the man had only just begun business, he would be content if the defendant was ordered to pay the costs. The Bench fined the defendant 1s. and 10s. costs.

At Thames Police Court, on July 7th, several persons were summoned by Mr. W. Thompson and Mr. A. Starkie, Officers of Customs, for selling substitutes for coffee and chicory without having labels attached. In the case of George Albert Cox, a grocer, of 178, Canale-street, St. George's, who was summoned for selling what was known as "German chicory," defendant pleaded "Guilty," and added that he purchased the packets from a firm in Fenchurch-street. Until he received the summons he was not aware the mixture was liable to duty. Mr. Dickinson said it had been admitted these small traders had not committed fraud, and he hoped the persons who were responsible would pay the penalties incurred. Defendant would only be fined 7s. Diedrich Meyer, 195, St. George's-street; John Henry Mohring, 59, St. George's-street; and Henry Hageman, of 19 Cannon-street-road, were each fined 7s. for a similar offence.

LARD.

At the Borough Police-court, Tewkesbury, on June 30th, Rowland Herbert Wilkes, trading as the London Tea Company, was summoned for selling, on the 25th ult., one pound of lard, not of the nature, substance, and quality required by the purchaser. Mr. Clement Moore, barrister (instructed by the County Council), prosecuted, and Mr. Bellinger, of Liverpool, defended. Police-constable Hodgetts proved the purchase of the lard, a sample of which he forwarded to be analysed. Mr. George Embrey, County Analyst, said he analysed the sample of lard. It appeared to be absolutely pure fat, with the addition of 2·4 per cent. of water. In pure lard there should be but a proportion of 0·3 to 0·6: there was usually 0·3 or 0·4. The only possible manner of adding the water would be to allow steam to blow into the melted lard during its manufacture; it would not be profitable to add it in a liquid form. It was possible that the water found in the lard was left from the steam as mentioned, it being employed in the manufacture to destroy all membranous and albuminous matters. For the defence it was urged that the water was an addition not injurious to health, and required for the production or preparation of the lard as an article of commerce, that the water had not been fraudulently added, and that the defendant bought and sold the lard as being of the finest brand in the market. The Bench considered that, although there was the presence of an undue amount of water in the lard, there was no evidence of fraud in its addition. They considered the authorities had done their duty in bringing the case forward, and informed the defendant that he left the Court without a stain upon his character as a shopkeeper.

BUTTER.

At Dublin, on the 22nd June, Edward Kavanagh, of 14, Mary's Abbey, provision merchant, was summoned at the suit of Food Inspector Lyons for having sold to him one pound in weight as butter which was not in substance butter. Mr. MacSheehy, Solicitor to the Corporation, prosecuted, and Mr. Hanmore defended. An elderly and rather respectably dressed woman, named Bridget Haughton, entered the witness box. Mr. Hanmore asked that the witnesses in the case and Food Inspector Lyons should leave the Court before evidence was given. This application was complied with. Bridget Haughton then stated she went to the provision shop of Mr. Kavanagh and asked for 1-lb of tennenny butter, and she was supplied by one of the assistants with a pound, for which she paid, and then she, in the shop, delivered it to Mr. Lyons, the Inspector. She had purchased it for Mr. Lyons the Inspector. Mr. Hanmore: How many times have you visited this shop? Witness: Only once. Did you see any label there like this (producing a margarine label)? I did not see one. I only went in and asked for a pound of butter. There may have been one. I do not know whether there was any label or not on the butter. Mr. O'Donel (to Mr. MacSheehy): Where is your case? Mr. Hanmore: This is an extraordinary proceeding against a respectable citizen, and should never have been brought. Mr. O'Donel: This witness, I suppose, is an official, but if so, is a very inefficient one. (To the witness): You may go down out of that. The whole proceeding is disgusting. Mr. Lyons then entered the Court and was sworn. He stated that he had sent the woman Haughton into the shop to purchase butter for him, and he followed her in. Mr. Hanmore: Did you tell her when she went into the shop to shut her eyes and not see from where the butter came? No. Mr. Hanmore: Why don't you do your own business, and not employ females? You are employed by the citizens. Witness: I followed my instructions. Mr. MacSheehy: Your instructions are not to tell the woman to keep her eyes shut. Mr. Hanmore then said that there was no case whatever made against his client. He asked that the summons should be dismissed with costs against the Corporation. Mr. O'Donel dismissed the summons, and gave 10s. costs against the Corporation.

Mr. Griffiths, of 324, Kentish Town-road, was convicted at Marylebone police-court of selling an article called butter, which on analysis was found to contain 85 per cent. of foreign fat. The defence was that the article was sold as purchased. A fine of 10s. with 12s. 6d. costs was imposed.

At Liverpool, on July 5th, Robert Boyle, grocer, 446, Stanley-road, was fined 20s. and costs, for having exposed for sale a lump of margarine which he had labelled "pure butter." Boyle stated in defence that his wife had inadvertently placed the wrong label on the margarine.

COCOA.

J. Ashton Gray, a postmaster and grocer in a large way of business in Devon's-road, Bromley-by-Bow, was summoned on July 7th for selling cocoa adulterated with 70 per cent. of sago, flour, and sugar. Mr. Eustace Miners, Sanitary Inspector, proved the case. Defendant pleaded "Guilty," and said he sold the cocoa as he received it. Mr. Dickinson told him he was the person responsible, and fined him £3 and 2s. costs.

OLIVE OIL.

At Gosport Police-court, on June 29th, Arthur Pigott and Walter Pigott, grocers, of Forton-road, were summoned for selling olive oil adulterated with 80 per cent. of foreign vegetable oil. Police Sergeant Davis proved the case. The defendants stated that the oil was sold in mistake by a young shopman; but such oil was never sold. It was "flask" oil, and was never sold as olive oil. The defendants were each fined 10s. and 7s. costs.

BRANDY.

At Knighton Police-court, on July 6th, James Smith, innkeeper, Greyhound Inn, Llangunllo, was charged with selling a pint of brandy 30 degrees under proof, on the 5th June, to the Chief-constable, John L. Lloyd. The Chief-constable gave evidence in support of the charge, and a certificate from the County Analyst was read. Fined £2 10s. and costs.

Geo. Newbold, licensed victualler, of Hugglescote, was summoned at Ashby Petty Sessions for selling adulterated brandy. Mr. J. J. Sharpe on behalf of the Coalville Licensed Victuallers' Association, defended.—Superintendent Holloway, Inspector under the Food and Drugs Act, said that on the 17th of May he received from his son Albert Edward, a pint of brandy which he had been sent to purchase. He took the brandy from his son and went to the defendant's house. He went into the house, and putting the brandy on the edge of the window, he said to Newbold: "You have just sold this brandy to this lad. It is being purchased for the purposes of being analysed. I will, if you wish it, divide it into three parts.—The Superintendent then stated that he divided the pint of brandy into three parts, one of which he gave the defendant, one he kept, and the third part he sent to the Analyst.—The Magistrates' Clerk, reading the certificate of Dr. Emmerson, said that he reported that the brandy was six below standard, and no change had taken place in the brandy which would interfere with analysis.—Mr. J. J. Sharpe, for defence, submitted that a notice that the spirits were adulterated had been posted in the bar, and that the notice was hanging up framed (produced), when the boy and the Superintendent entered the house, and which he submitted was sufficient defence to the charge. It was in a position where it could be seen, and the defendant was not liable. It was held so in the case of *Sanders v. Small*.—The clerk pointed out that the notice should be in a conspicuous place, and to the knowledge of all purchasers. In answer to the Chairman, Master Albert Holloway said, "My notice was not called to the printed notice, nor did I see it."—After conversation between Bench and solicitor, in which the magistrates thought that the notice should be more prominent and within view of the purchaser, the defendant was fined 5s. 6d. and costs, and the conviction not to be recorded.

WHISKY.

At the Police-court, Cheltenham, on the 29th ult., Henry Dredge, district manager for Messrs. Garton and Co., brewers, of Bristol, and licensee of the Bee Hive Inn, Montpellier, was summoned for selling adulterated whisky. Mr. Moore, barrister, was for the defence. Mr. George Embrey, of Gloucester, County Analyst, declared that the strength of the whisky was equal to 32 degrees under proof, instead of 25, as allowed by Section 6 of the Sale of Food and Drugs Act, and that it had been reduced to this extent by the addition of water. For the defence, Mr. Dredge stated that the whisky was not supplied by Messrs. Garton and Co., but purchased in Cheltenham, and that he held the license because Messrs. Garton and Co. had been unable to get a tenant. The Bench imposed a fine of £3, with £1 odd costs.

At Nuneaton Petty Sessions, on June 29th, an Atherstone licensed victualler named Charles Anderson, was summoned by Mr. G. H. Salmon (Inspector under the Food and Drugs Act) for selling whisky adulterated with 12 per cent. of water. Defendant was ill and did not appear, but his wife said he had mixed the whisky and did not quite understand the process. Fined £2 and 14s. costs.

At Christchurch Petty Sessions, on June 26th, before the Mayor (Alderman E. Lane),—Alfred Toomer, Horse and Groom Inn, Christchurch, was summoned for selling whisky to the prejudice of the purchaser, and not of the quality and substance demanded, on the 30th May.—Mr. Lamport, of Southampton, appeared for the defence, and raised a technical objection to the summons on the ground that it was signed by a county magistrate (Mr. H. H. C. Seymour), instead of by a borough magistrate. He contended that as the case was a borough one, the alleged offence having been committed within the borough of Christchurch, the summons should have been signed by either the Mayor, or the ex-Mayor, in the absence of a separate Commission of the Peace.—The Clerk (Mr. James Druitt, sen.) said there were no magistrates whatever for the borough of Christchurch. There were certain *ex-officio* magistrates within the borough, and for dealing with cases arising within the borough those magistrates sat as justices for the county.—The Bench overruled the objection, and, in reply to Mr. Lamport, the Mayor intimated that they did not consider there was sufficient to support the point raised which would justify them in granting a case.—The Clerk: Your course would be to make application in writing for a case, showing clearly what your ground is.—The case was then proceeded with, P.S. Hawkins, of Shirley, giving evidence as to purchasing at defendant's house half a pint of Scotch whisky, a portion of which was subsequently analysed. The certificate of the Analyst showed that it was 27·32 under proof, and that it consisted of 96·8 parts of whisky and 3·2 parts of water.—Mr. Lamport, for the defence, reminded the Bench that the law allowed spirits to be sold 25 degrees under proof, so that the whisky in question was only 2·32 lower than the law allowed. He asked the Bench to believe that this was the result of an accident of which the defendant had not the slightest knowledge, and that therefore he was entitled to acquittal on the charge. He called Mrs. Elizabeth Watts, sister of the defendant, who stated that about a fortnight before the alleged offence some gentlemen came to the house and asked to be supplied with three Irish and one Scotch whiskies. By mistake she served three Scotch and one Irish, and the error was not discovered until the customers had added water to the whisky. She then changed it, and, without thinking what she was doing, returned the two Scotch whiskies, to which water had been added, to the bottle. No more whisky was sold from the bottle until the police-sergeant was supplied with the half-pint, defendant having a very small demand for Scotch whisky. Witness never informed the defendant of the mistake she had made.—Defendant was examined, and denied that he had the slightest knowledge of the incident mentioned by the last witness, or of the fact that water had been accidentally added to the whisky.—The Bench convicted, and defendant was fined 20s. and 29s. costs.

A WHISKY APPEAL.

At Glamorganshire Sessions, on June 29th, George Davies, occupant of the Colliers' Arms, Nantgarw, appealed against a conviction of having, on December 10th, 1892, sold whisky adulterated to the following extent:—Alcohol, 32 per cent.; water and extractive matter, 67 per cent.; the whisky itself being 32 degrees under proof. Mr. Arthur Lewis and Mr. Rhys Williams appeared for the appellant, and Mr. Benson and Mr. P. Evans were for the respondent. Sergeant Frederick Dagg, Assistant Inspector under the Food and Drugs Act, spoke of visiting the Colliers' Arms, Nantgarw, on December 10th, and purchasing sixpennyworth of whisky from the appellant's wife for purposes of analysis. Cross-examined: The name of the witness appeared on the information as prosecutor. Superintendent Wake gave evidence as to his having taken the whisky to the Public Analyst for analysis. Charles Evans stated that he acted as Deputy Clerk when the case was heard before the magistrates at Caerphilly. Before the case was commenced no objection was taken to the summons; an objection was raised after the cross-examination of the Assistant Inspector. In his cross-examination, Sergeant Dagg stated that he obtained the whisky for the purpose of analysis. Sergeant Brinson, of Caerphilly, said he received the report and summons from Mr. Evans, the Justices' Clerk. Mr. Llewellyn signed the summons, which was then served. Dagg wrote the report and signed it. Witness handed the report to the Justices, and the summons was issued on that report. Everything was done in accordance with the usual practice. Objection was taken by Mr. Arthur Lewis—1st, that the information for the summons was not laid by Sergeant Dagg before the magistrates who signed it; 2nd, that the summons did not set out the particulars of the offence against the Food and Drugs Act, 1879, as enacted by Section 10 of that Act; 3, that Section 14 of the Food and Drugs Act in two respects, viz., that he divided the whisky into three parts without offering to do so to the seller or his agent, and that he (the purchaser) simply notified that he was going to have the whisky analysed; and 4th, that the person causing the analysis of the whisky was Superintendent Blake, and should have been the person to take proceedings, whereas the summons was issued on the alleged information of Frederick Dagg. Judge Williams, in reply, stated that had the objection been laid when the case was first called on before the magistrates at Caerphilly it might have held good, but he did not think it was equally effective after they had allowed the case to be proceeded with. He maintained that the appellant ought to have seen the effect of the summons before proceeding. Mr. Lewis maintained that he was entitled to make the objection now in a Court which had to rehear the case from the beginning. Mr. Benson maintained that as the objection had been waived, *i.e.*, not taken in time before the Justices, it could not be raised now. Mr. Lewis cited various cases to show that by his action in taking the sample to the Public Analyst, Superintendent Wake was the person who had set the Public Analyst in motion, and therefore he and he alone ought to have taken the proceedings. The Bench overruled this contention, maintaining that Sergeant Dagg was rightfully the prosecutor, Superintendent Wake having simply acted as his messenger. The Court, after further argument on the part of Mr. Lewis, held that though the summons was defective, the defect was cured and waived by the appellant, and could not be revived here, and they further held that no other objection fatal to the proceedings and within the notice of the appeal had been made. The case would be dismissed with costs. Mr. A. Lewis applied for a case, which was granted, to be presented by the 25th July.

At Wycombe Borough Petty Session, William Mitchell, Plough Inn, Denmark-street, pleaded guilty to an information, laid by Supt. Sparling, as Inspector of Food and Drugs, that on May 25th he did sell a pint of whisky adulterated with 33·07 per cent. of water. Supt. Sparling said he purchased, through a constable, a pint of whisky at defendant's house, it being supplied by defendant's mother-in-law, who was in charge of the bar. He divided it in the usual way, leaving one part in defendant's custody, sending one to the Public Analyst, and retaining the other himself. There was no notice in the house to the effect that spirits were diluted in accordance with the Food and Drugs Act. The Analyst's certificate showed that the whisky was 33·07 per cent. under proof, the limit fixed by the Act being 25 per cent. Defendant said he had no wish to break the law. His mother-in-law was in charge, and made a mistake in some way. He assured the Bench it was entirely a mistake. The Bench inflicted a fine of 5s. and £1 1s. costs, and the Mayor congratulated the Superintendent on the diligent manner in which he was carrying out his duties in connection with the Food and Drugs and Weights and Measures Acts.

WHISKY AND WATER.—A LICENSE ENDORSED.

At Midhurst Petty Sessions, on July 6, before Mr. J. M. Dowdeswell, Q.C. (in the chair), Mr. J. W. Woods, Colonel W. H. Watson, and Lieut.-Colonel Hollist, Robert Carter Pelter, licensed victualler, of Rogate, was summoned for selling six ounces of whisky, adulterated by the addition of water to more than 25 degrees under proof.—Defendant pleaded guilty.—The Chairman said that publicans knew there was quite enough water in whisky when it came to them without any more being added. It was a fraud upon poor people to do such things. Defendant would be fined £1 and costs, and his license would be endorsed. This, he hoped, would be a warning both to brewers and publicans.

At the fortnightly sitting of the Chichester County Magistrates on July 8th, Mrs. Sarah Sparrow, landlady of the Lamb Inn, Westbourne, was fined 20s. and costs for selling adulterated whisky to Police-constable Wilkins on May 26th.

A RIDICULOUS FINE.

At Basingstoke, on the 20th ult., Eli Drewett, landlord of the Railway Arms Inn, was summoned for selling Irish whisky adulterated. Sergt. Ernest George Hawkins, of Shirley, stated that on the 25th May, he visited defendant's house, and asked for half a pint of Irish whisky with which he was supplied. The same day he submitted one part to the Public Analyst, whose certificate of analysis he now produced showing that the whisky was 32·45 degrees under proof. Mr. Lamb admitted that a technical offence had been proved, but pleaded that the offence arose through thoughtlessness. The defendant had had the notice produced (to the effect that all spirits sold at his house were diluted) put up in his bar in a conspicuous place so that all the customers could see it, but the bar having been newly painted the notice was temporarily removed, and at the time the officer called had not been replaced. He therefore asked the Bench to inflict only a nominal penalty or to dismiss the case on payment of the costs. Sergeant Hawkins submitted that the notice, if it had been exhibited, would be no defence to the charge. The Bench inflicted a fine of 1s. and costs.

At Swansea, on the 26th June, Margaret Davies, landlady of the New Inn, Centre, was fined 20s. and costs for selling whisky adulterated 13 degrees below the standard.

At Broose Petty Sessions, Robert Thomas Barter was summoned for selling whisky 39 degrees under proof. P.s. Evans, (Neyland) proved the charge, and deposed that the sample of whisky he purchased from the defendant had been sent to the public analyst who certified that it was 39 degrees under proof. Mr. Carrow (jocularly): I think it was all the better for the customer. (Laughter.) The Bench imposed a fine of 10s and costs.

MILK.

MAGISTRATES FREAKS.

At Lynn Police-court, on June 30th, Alfred Strawson was summoned under the Adulteration Act for selling by the hand of his wife one pint of inferior milk. Mr. W. R. Sadler appeared for the defence. Chief Constable Ware stated that at the request of the Medical Officer of Health, on Wednesday, 14th ult., he went to the house of the defendant, who kept a public-house and also a dairy. He there saw defendant's wife and told her he wanted a pint of new milk for the Public Analyst. She told him they were just milking the cows, and he said "Have you got any of this morning's milk?" She said "Yes," and witness said "You understand, I don't want skimmed milk." She brought three pints. The defendant was not there at the time. Witness asked her to show him the dairy after giving him the milk, and it was a very clean place indeed. She showed him the milk pail she took the milk from, and showed him another vessel where she kept the skimmed milk. Witness received a certificate from the Public Analyst at Cambridge, who said the milk was deprived of 75 per cent. of its cream. If only a small percentage of the cream was missing no action would have been taken; but when 75 per cent. was missing there was no alternative but to take proceedings. In answer to the Bench witness said if new milk was asked for 75 per cent. of the natural cream should not be missing from it, no matter at what time of the day the purchase was made. He paid the price of new milk, and he purposely said he wanted "new" milk. By Mr. Sadler: The defendant's wife was there, and she told witness her husband was out milking. She led him to believe he would be home shortly. She said if he liked to wait until he came in with the new milk he could have some. She might have said he would be in shortly. He took a sample of the milk that there was at the place, and he was satisfied with the milk at the time. Addressing the Bench, Mr. Ware said the object was not to discover whether there was any deficiency in the milk, but for something else, and was not purchased with a view to consuming it. Mr. Pridgeon said cream would rise very rapidly this warm weather, and if anything passed through the cream it would pass through without catching much of the cream. Witness said there would certainly be some slight loss of cream, but he was not prepared to say nearly the whole of the cream would be missing. Mr. Pridgeon thought there would be very little cream left in the milk after standing from six o'clock in the morning till six o'clock in the evening. In answer to the Bench the witness said he did not notice any cream in the pint of milk, but in the pan there was a considerable quantity of surface cream. After some further discussion, the Mayor said the Bench had unanimously decided to dismiss the case. They were of opinion that the defendant's wife, in serving the milk, knew the purpose for which Mr. Ware wanted it.

On June 28th, at the Cardiff Borough Police-court, Robert Evans, milk dealer, Strathnairn-street, was summoned under the Food and Drugs Act for selling adulterated milk. According to the certificate of the Borough Analyst there was 16 per cent. of added water in the milk. Defendant pleaded that although he had sold milk for the last 13 years and had his supply frequently tested, it had always been with satisfactory results. On this the mitigated penalty of 10s. and costs was imposed.

On July 3rd, Pearce and Plenty (Limited), refreshment contractors, appeared through a solicitor to a summons, issued at the instance of the St. Saviour's District Board of Works, charging them with selling milk which was not of the proper quality. A certificate from the Public Analyst showed that a sample of milk purchased from the defendants was deficient in butter fat to the extent of 15 per cent. For the defence it was pleaded the milk was sold just as it was purchased. Mr. Fenwick imposed a fine of £3, and 12s. 6d. costs.

SEQUEL TO THE SKIPTON CASE.

At Skipton Petty Sessions, on June 24th, Enoch Stevenson, milk dealer, Cowling, was summoned by Mr. A. Randerson, Inspector under the Food and Drugs Act, Skipton, for this offence. Mr. E. V. Riley (from the West Riding Solicitors' Offices, Wakefield) appeared for the prosecution, and Mr. W. A. Robinson (Messrs. Robinson and Robinson) defended. The case was one that was dismissed a fortnight ago on account of a technical flaw in the summons. It appeared that on the 15th May, Mr. Randerson was at Cowling about 7.30 a.m. He saw defendant delivering milk. He stopped him as he was coming from a house and asked him for a pint of new milk, for which he paid one penny. He told him that he required it for analytical purposes, and offered to divide it into three parts. Defendant said he did not know that it made any matter. The Analyst's certificate showed that 88 per cent. was milk and 12 per cent. added water. The offence came under Sec. 6 of the Food and Drugs Act of 1876, and was a serious one, and he should ask the Bench to impose a heavy penalty. Mr. A. Randerson gave corroborative evidence, and Mr. Robinson asked him if he was aware that whether the quality of the milk was reduced by abstracting cream or by adding water the chemical result was exactly the same. Mr. Randerson said he was not. Mr. Robinson asked for the written information, and asked before which magistrate it had been laid. Mr. Randerson said that he had the first summons signed by Mr. T. H. Dewhurst, but it was the magistrate's clerk who had got the second one signed. Mr. Robinson on that ground contended that the case was at an end. He also argued that they had no proof that the milk had been divided into two parts. It ought to have been clearly stated on the face of the analyst's certificate. The Chairman said that the Bench felt inclined to over-rule Mr. Robinson's objections. Mr. Robinson said that he had raised two legal points which he considered fatal to the summons, and he proposed to call evidence for the defence, and after that he should ask their Worships to state a case. The case for the defence was that he was milking eight cows at the time Mr. Randerson got a sample of his milk. Three of them were newly calven. All the milk was mixed together, and no water whatever was added. He had sold about four quarts before he met Mr. Randerson. On account of the condition of the cows it was argued that though there was a larger quantity of milk given, the quality was less. Milk was composed of 90 per cent. water and the rest fatty substance, and the effect of taking milk continually from the large can would be to take away most of the cream. Therefore, that left in the large can would be of poorer quality. However, defendant had milked all the cows but two himself, and both he and his sister swore that no water had been added.—Defendant gave evidence of a corroborative character, saying he had been in the business about three years.—Robert Stevenson, a neighbour, and Emma Stevenson, defendant's sister also corroborated.—The Chairman said that with the Analyst's certificate before them they could not but believe that water had been added; they would not say by defendant but undoubtedly water had been added by someone, or the analyst would not have added the words "Added water." They should fine the defendant 40s. and costs.

At Edgware Petty Sessions, on July 5th, before Messrs. W. S. Gilbert, in the chair, and G. E. Worthington, Harry Elliot, Victoria Dairy, West-street, Harrow, was summoned for selling milk adulterated with 10 per cent. of added water, on the 7th June. Mr. Allingham defended. Robert Watts, Inspector of Food and Drugs, said that on the 7th June, he saw defendant's boy, Arthur Goodes, selling milk at West-street, Harrow, and bought a pint of new milk of him, for which he gave 2d. He told him it was to be analysed and offered to divide it in the usual way, which offer was accepted. He had it analysed and now produced the Analyst's certificate, which declared it to be adulterated with at least 10 per cent. of added water. Cross-examined by Mr. Allingham: He did not know the Victoria Dairy, and did not know Mr. Elliot. He took the sample somewhere in West-street. He did not see the boy sell milk to any one else. He believed that the drought affected the quantity but not the quality of the milk. He had received a notice from him (Mr. Allingham), telling him that he should rely on a warranty. Mr. Allingham, for the defence, said that he intended to rely on the warranty. But he had taken the trouble to have his sample analysed by Mr. Sibson, an Analyst who was as well known as, and perhaps better than Mr. Bevan (the County Analyst), and (it was very odd), he declared it to contain no added water, though it contained less solids than milk should. But, as he had said, he should rely on the warranty and would trace the milk from the cow to the customer. Harry Elliot, the defendant, said that samples of his milk had been taken previously, and he had been summoned once, but the case was dismissed. He had a letter from Mr. Parsons, of Grove Farm, offering to supply him with 20 barn gallons of pure milk daily, which he now produced. On the morning in question he sent his man Stiles to Mr. Parsons for it, and on his return measured it and sent the boy Goodes out with three quarts in a hand-can. The latter came back within five minutes with the sealed sample. Witness did not examine his can to see how much milk he had left. Henry Stiles spoke to fetching the milk from the farm and said he saw the cows milked. He could swear that nothing was added up to the time the boy took it out. Arthur Goodes, the boy, said he took the three quarts of milk out in the hand-can. He did not see Mr. Elliot put the milk into the can. He was stopped by Mr. Watts about 120 yards from the dairy, and before he had served any customers. He had added nothing to it since he received it. William Parsons, of Grove Farm, Northolt-road, Harrow, admitted

that the letter produced by Mr. Elliot was written by him, and said he had never supplied anything else but pure milk. He remembered Stiles coming on the morning in question, and said the milk was delivered just as it came from the cows. He had had experience with cows and should consider that the fact of the cows drinking more water in the hot weather would impoverish the milk. *Mr. Watts contended that the letter produced did not constitute a warranty, but was merely an offer to supply.* Mr. Allingham said that even if it did not, the Bench might take it from the evidence that the milk was supplied pure from the cows, and, as he had said, the drought might affect them. *Mr. Gilbert said he himself had 80 cows and though the quantity was affected, he did not find the quality affected.* Fined 40s. and costs, including the Analyst's fee.

John Chalman, West-street, Harrow, was summoned for selling milk adulterated with at least 10 per cent. of added water, on the 7th June. Mr. Watts said he met the defendant's boy, Thomas Hoare, in the street, and asked him for a pint of new milk, and as soon as he asked for it the boy began to shift the measures from one can to the other. He was served with a pint, for which he paid 1½d., and divided it in the usual way. The Analyst certified that it contained at least 10 per cent. of added water. He also bought a pint from the other can for which he paid 2d. The certificate stated that it was very inferior, and most probably adulterated. He was not summoned for the latter. Defendant said that the boy had no right to sell that for which he charged 1½d. a pint, for it was stale milk intended for a baker. Mr. Watts said the boy told him it was for coffee shops and such like. If the boy had not sold him any he should have taken a sample, as he was empowered to do. Fined 40s. and costs.

At Staines, on July 3rd, Newland Eldridge, dairyman, Church-street, Staines, was summoned for selling a quantity of milk to Mr. Walter Tyler, Inspector for the district under the Food and Drugs Act, the same not of the nature, substance, and quality demanded, it being adulterated with at least 10 per cent. of added water. Defendant pleaded not guilty. Edward Watkins said he asked a lad named Robert Eldridge, who was in charge of a cart, for a pint of new milk. Mr. Tyler said he received the milk from the last witness, and afterwards sent it to the Public Analyst. He produced a certificate, which stated the milk contained 10 per cent. of added water. Mr. Tyler added that he had taken a great many samples from the defendant before, and they had always been of good quality. The Chairman said that in considering the case the magistrates did not for one moment believe that the defendant was aware of the existence of the water in the milk. He had had several other samples analysed and all had been found correct. A fine would not be imposed, but the defendant would be called upon to pay 10s. 6d. for the Analysts' fee, and 9s. 6d. Court costs.—Harden Honnor, Church Farm, Laleham, was summoned for selling a quantity of milk from which 40 per cent. of fat had been abstracted, on the 15th June. Edward Watkins said he asked a servant in the employ of Mr. Honnor for a pint of new milk, and received a pint of milk for which he paid 2d. Mr. Tyler produced the necessary certificate which stated that the milk was deficient of cream to the extent of at least 40 per cent. He ascertained that 2d. had been paid for the milk. He was told that there were three qualities of milk at the farm. Ellen Armsworth said she served the milk, which she took from a can, the contents of which had been set for cream since the morning. She told the young man who bought the milk that they had no new milk, but that they had some "morning" milk. Harriet Honnor said she saw where the milk was taken from, and found that the cream had risen, the milk having been set since the morning. In dipping, the cream had not been taken up with the milk, and hence the absence of it. The man was informed that he could not have new milk, and the milk he had was not sold to him as such. The Chairman said the case was a very peculiar one. The mistake was evidently accidental, but a fine of 5s. would be imposed.

THE DROUGHT AND MILK.

At Llandudno, on July 5th, before Dr. Dalton, presiding, and other magistrates, William Owen, farmer, Penrynnydd, Great Orme's Head, was summoned by Daniel Edwards, Inspector, at the instance of the Llandudno Commissioners, for selling milk from which part of the cream had been abstracted. Mr. R. S. Chamberlain appeared for the Commissioners, and said that samples were taken and sent to Mr. Lowe, County Analyst, Chester, for analysis, which showed that the sample had been deprived of not less than 12 per cent. of cream. If the milk were of average quality it had been deprived of above 30 per cent. of cream, as the above had been calculated on the poorest milk. Daniel Edwards having given evidence, Mr. E. E. Bone, for the defendant, said that his client had been at Penrynnydd 30 years, and would swear that never had the cream been extracted before selling. The poor quality of the milk was due to the long drought, in consequence of which it had been necessary to feed the cows on bran meal to make up for the dryness of the grass. His client was willing to pay the Inspector's expenses to go to Penrynnydd, and see the cows milked, and get a sample for analysis. If his client were convicted in this case, he would be liable to be convicted continually. Mr. Chamberlain said that was a fair suggestion, and the Bench adjourned the case for a month so that a sample may be sent to Somerset House for analysis.

At Hampstead Petty Sessions, Frederick H. Smeeton, dairyman, of Hornsey, was summoned by William Tomlin, a Middlesex County Council Inspector, for having sold milk adulterated with six per cent. of added water. Defendant said he sold the milk as he received it. The Bench fined him £3 and 17s. costs, and told him that he had his remedy against the person from whom he bought the milk.

MR. WILLIAM BROWN AGAIN.

William Brown, trading as the Farmers Direct Supply Company, Mile End-road, was summoned for selling new milk from which 30 per cent. of the fat had been taken. For the defence it was urged that it was not a case of added water. Mr. Leete said there had been two previous convictions, and the public had been defrauded to a large extent. The magistrate imposed a fine of £10 and 12s. 6d. costs.

At West London Police-court, on June 23rd, before Mr. Curtis-Bennett, George Edwin Dunning, of the Farmers' District Supply Company Association, at South-grove, Bow, was summoned for selling milk from which it was said 44 per cent. of the fat had been abstracted. William Brown, a milk seller in Dunning's employ, was also summoned for selling the milk. Mr. Jones, Inspector under the Sale of Food and Drugs Act to the Fulham Vestry, said that he purchased a pint of milk from the defendant, and upon analysis it was found that 44 per cent. of the fat had been abstracted. A solicitor who appeared for the defence pointed out that the summons was taken out under the wrong Section, and on this ground the case was dismissed. Samuel Pritchitt, of 28, Pomona-place, Fulham, was summoned for selling milk. Inspector Jones and Griggs acted in this case, and the milk was bought at defendant's shop. It was shown that 15 per cent. of added water was found to be included when the analysis was made. A fine of 20s., with 12s. 6d. costs, was imposed.

At the Lambeth Police-court, on June 26th, Thos. Lloyd, 14, Choumert-road, Peckham, was summoned by Inspector Dewey, on behalf of the Camberwell Vestry, for selling milk containing 6 per cent. of added water. Mr. G. W. Marsden, solicitor, appeared in support of the summons. The defendant admitted the sale of the milk, and Mr. Hopkins ordered him to pay a fine of 10s. and 12s. 6d. costs.

At Marylebone Police-court, on July 2nd, Mr. J. Southam, of Halton, Wheatley, Oxfordshire, appeared to answer six summonses issued at the instance of the Paddington Vestry for sending milk to London adulterated with water varying from 6 to 12 per cent. Samples of the milk were taken from churns on their arrival at Paddington. The facts were not disputed. On behalf of the defendant it was stated that the defendant had been sending milk to London for 28 years, and this was the first time his milk had been complained of. As soon as these summonses came to his knowledge samples of the milk given by his cows were taken and submitted to an Analyst, and the certificates he gave showed a larger percentage of water than that set out in these summonses. This was solely due to the drought which had prevailed. The Magistrate said he could not take judicial cognisance of the drought, but of course he would not lose sight of the fact. The explanation, however, was no answer to the summons. The defendant assured the magistrate that there was no green food for the cows to eat in the country, and they were obliged even to devour the small branches of trees. Under the circumstances it was quite impossible to get good rich milk. The Magistrate replied that the facts referred to were only too well known, but it was no defence. Traders must expect to have difficulties in their business. He ordered the defendant to pay (including costs), £4 16s. The defendant: I only wish, you, sir, could see the cows and the water and food they have, and I do not think you would wonder that you cannot get good rich milk.

At West London Police-court, on the 27th June, Walter Pickford, 30, All Saints'-road, North Kensington, was summoned for selling milk with 8 per cent. extraneous water added. Defendant pleaded guilty. Previous convictions were proved, and a fine of £5 and 12s. 6d. costs were imposed.—John Slow, of 24, St. Clement's-road, was also summoned for selling milk with 7 per cent. of extraneous water added. Defendant did not appear, but it was urged that the milk was out all night and it was a very wet night. No previous conviction was proved, and a fine of 20s. was imposed and 12s. 6d. costs.

At the Liverpool County Magistrates' Court, on July 5th, two summonses were heard against David Benjamin Cash, trading as the Callow-park Milk Co., Roscommon-street, charging him with selling milk whose quality had been injuriously affected. Superintendent Walsh prosecuted, and Mr. Neale defended. It appeared from the police evidence that defendant was, under a contract, supplying about 140 gallons daily to Walton Workhouse. On the 13th ult. a Police Sergeant took a sample from each of the five cans of milk delivered, and in respect of two of the samples Dr. Campbell Brown, Public Analyst, certified that the milk had been deprived of a quarter of its cream. For the defence it was contended that the milk had not been injuriously affected. The defendant it was explained, obtained most of his milk from distant parts of Cheshire, Derbyshire &c., and the railway journey, combined with the very hot weather caused the milk to be churned and small lumps of greasy substance or butter to appear on the top. Before being sent out the milk was strained through fine muslin, so as to remove the greasy substance which was worthless and dirty, from the accumulation of dust on the journey, and had to be thrown away. No cream was extracted by the straining process. Mr. Hugh Carruthers, chairman of the Liverpool Dairy-men's Association, said it was a common thing in the summer to find milk churned in the way described after a railway journey, and it was the invariable practice to strain it when in that condition. Otherwise it was unsaleable, and he himself had deliveries refused at Brownlow-hill Workhouse because of there being butter on the top. In the winter, milk was strained to remove the dirt only. Mr. Cartwright, milk dealer, corroborated. The Bench decided that they could not go past the analysis of Dr. Campbell Brown, and defendant would be fined 10s. and costs in each of the two cases.

MEAT PROSECUTION.

Charles Hiley, greengrocer, of Odsal, was summoned at the Bradford Borough Police-court, on June 30th, for having in his possession the carcass of a diseased cow prepared for sale as food.—One of the Corporation Meat Inspectors stated that on visiting the slaughter-house on the 17th ult. he saw there the carcass of a cow of which he was suspicious, dressed for food. He asked who owned the carcass, and he was told that Hiley was the owner. He gave instructions that the carcass should not be removed.—Dr. Evans (Medical Officer of Health) stated that it was evident from the state of the carcass and of the intestines that the animal had suffered from dropsy before it was killed. The flesh had not "set" in the manner that good meat usually did. There was no doubt that the animal contained more water than a healthy animal should. The lungs were quite waterlogged. The meat was unfit for food.—Mr. M. Banks Newel, who appeared for the defendant, said that unfortunately his client was not an experienced butcher. He had made a mistake, and was very sorry for it. He trusted that a lenient view would be taken of the case.—A fine of £2 and 9s. costs was imposed, with the alternative of twenty-one days' imprisonment.

At Stranraer Burgh Court on the 8th inst., John M'Dowall, dealer, residing in Whithorn, was convicted of having consigned to M'Dowalls Auction Mart, Stranraer, 147lbs. of pork unfit for human food. It was described by expert witnesses as being in a very bad condition. He was fined in 30s. with 25s. expenses, the alternative being 21 days' imprisonment. An appeal to the Court of Justiciary was intimated.

SHRIMPS.

At Ashby Petty Sessions, George Caverner, fish dealer, of 34, Rolleston-street, Leicester, was summoned for exposing 64lbs. of shrimps "unfit for the food of man" at Coalville market, on the 16th June.—Mr. Michael McCarthy, Assistant Sanitary Inspector, prosecuted.—Mr. Jesson, Clerk to the Coalville Local Board, appeared for the prosecution, and said the penalty was somewhat heavy—£20—but he could not say how many fish were in the lot, but taking 64lbs., and 480 shrimps a lb., it made 30,720, and a penalty for each fish (shrimps) would save the Coalville Local Board making any application to the Local Government Board for a loan for sewage works. (Laughter.) He suggested that the limit be 100 shrimps.—Mr. Baldwin, the surveyor, and Mr. McCarthy, having given evidence, the defendant was ordered to pay a fine of 6d. per shrimp (£2 10s.) and costs, in all £3 10s.—The money was paid.

WEIGHTS AND MEASURES PROSECUTION.

At Thirsk Petty Sessions, on July 3rd, an important milk case to the public was tried, which was that of Stavelly Sturdy, of Topcliffe, for having an unjust half-pint measure in his possession. Inspector George Hind proved going to the defendant's shop and finding the measure produced, which was short measure. Mr. W. R. West, who defended, said he based his defence on section 22 of the Act, that the measure was not used for selling goods by measure, for his client's milk was sold by half-pennyworths and pennyworths, and that the quantity of milk supplied for those sums varied, and that the measure in question had never been used for half a pint, for when butter was dear they (the public) got less milk, and when it was cheap, as it had been of late, they got more milk. According to circumstances of this kind his client could give his customer as much as he liked or as little so long as his customer was satisfied. He called two customers, who swore that for years they had bought milk of the defendant in this manner. The Chairman remarked that he thought the case came under the exceptions to the Act. If the Inspector had asked for half a pint of milk, there would have been a case if he had been supplied with this identical measure. The case would be dismissed.

Selina Cook, Clock House Farm, Ashford, was summoned at Staines on July 3rd, for having in her possession = 2lb. 1lb., and 1lb. weights, and one weighing instrument, and a gill measure, all of which were unstamped. Mr. Tyler said he went to the Clock House Farm and saw a pair of scales and some measures. The scales and a gill measure were unstamped. Defendant said the scales were for her own private use, and the measure was a new one. The defendant was fined 20s., including costs.

CORRESPONDENCE.

IRISH GRAND JURIES AND THE ADULTERATION ACTS.

To the EDITOR of FOOD AND SANITATION.

Sir,—The Grand Juries ought to provide Inspectors with gratis copies of your paper. I think it should be charged as a necessary expense, as no Inspector who is anxious to carry his prosecutions through successfully should be without it. He will always find something instructive in it. Now that the Food and Drugs' Acts are about being amended, I would like to mention a matter which has occurred to me in connection with Section 23 of the 38 and 39 Vict., cap. 63, in the matter of Appeals under the Act. You will see in the section referred to that it is only a person "convicted" who has the right of Appeal. As it stands at present an Inspector has no Appeal, no matter how glaring the dismissal; he may either let the matter drop, or seek redress in a Superior Court, which is very expensive. Local Authorities do not like to incur such expense. If the Inspector had the same right of Appeal, it would be less expensive in the end on Local Bodies.

I am, etc.,

INSPECTOR, R.I.C.

To the EDITOR of FOOD AND SANITATION.

Dear Sir,—I notice in your issue of this day's date, a paragraph in which it is stated that Southport has no Analyst; this is an error—they have one, and a good man he is, he holds the appointment of Public Analyst also to this Borough.

I believe the Southport position is payable by fees, and from what I can gather the "powers that be" are rather lax in taking samples.

Hoping you will correct the error, I remain, yours faithfully,
JOHN SUMNER,
Sanitary Department,
8th July, 1893.

Inspector under Food and Drugs Acts.

VINEGAR AND PICKLES.

To the EDITOR of FOOD AND SANITATION.

Sir,—If acetic acid and water is not vinegar, why is it grocers are allowed to sell pickles put up in that mixture, and described as being in pure vinegar, and run no risk of being fined?

A VINEGAR MAKER.

ANSWERS TO CORRESPONDENTS.

INSPECTOR.—We have not seen the Sanitary Inspector's Handbook, but believe you can obtain it from H. K. Lewis, Gower-street, London, W.C. Public Health Laboratory work you will find noticed in No. 40, FOOD AND SANITATION.

VINEGAR.—The vinegars in question are undoubtedly impure.

FOOD INSPECTOR, ENNIS.—Glad you find our journal so useful. The case is important to all Inspectors, and we congratulate you on your success.

W. H. W., SAN. INSPR.—We are crowded out with food prosecutions, but may be able to use the information later. Thanks for sending it.

PINK POWDER.—Do not deal with the firm you name. We have recently had a case of swindling in this.

IZAL DISINFECTANT.—Dr. Klein's experiments do not prove that it is non-poisonous, but that two rabbits received each 0.25 c.c. of Izal, reduced to 1 in 100 strength, and that they remained well. Such experiments have no bearing upon the case of the man poisoned at Preston who swallowed 4 ounces of the fluid. We shall refer to the matter further, and to the evidence, in our next issue.

INSPECTOR, CONDENSED MILK.—See No's 43 and 44. Notice of appeal from Mr. Littler's decision has been given, but the appeal has not yet been decided. The West London Case is in a similar position. Copy sent by post.

GROCEER, BRISTOL.—Panter Woodward's Vinegar. We cannot go into the merits of the point you raise now, but we doubt very much if such a class of vinegar can be considered adulterated. As to the other vinegars you name, they are undeniably dangerous to deal in.

VINEGAR, BIRMINGHAM.—We do not regard either the Worcester or Norwich vinegars as high-class. Get a warranty indemnifying you for costs and damages in the event of prosecution, and if you are fined, sue and expose the makers.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended July 8th, 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities.	
	1892.	1893.
Animals living:		
Oxen, bulls, cows, and calves	12,484	9,085
Sheep and lambs	343	1,248
Swine	456	—
Fresh meat:—		
Beef	94,026	21,103
Mutton	24,787	28,420
Pork	481	2,747
Salted or preserved meat:—		
Bacon	78,136	68,081
Beef	8,967	5,158
Hams	84,008	29,911
Pork	4,220	3,323
Meat unenumerated, salted and fresh	2,461	2,567
Meat preserved, otherwise than by salting	24,404	12,115
Dairy produce and substitutes:—		
Butter	38,617	43,868
Margarine	19,521	21,561
Cheese	78,232	57,880
Condensed milk	9,481	12,439
Eggs	234,396	224,812
Poultry and Game	Value £ 1,076	2,475
Rabbits, dead (not tinned)	26	212
Lard	19,335	22,030
Corn, Grain, Meal and Flour:—		
Wheat	2,299,295	1,964,008
Wheat Meal and Flour	444,190	327,449
Barley	20,774	383,318
Oats	493,340	424,396
Pease	10,545	45,616
Beans	87,793	46,307
Maize or Indian Corn	923,118	637,770
Fruit, Raw:—		
Apples	8,498	13,001
Oranges	39,042	3,728
Lemons	13,946	22,051
Cherries	3,548	63,255
Plums	1,107	23,657
Pears	1,079	2,382
Grapes	45,883	64,371
Unenumerated	—	—
Hay	—	—
Hops	102	2,332
Vegetables:—		
Onions, raw	83,145	78,529
Potatoes	253,488	87,475
Unenumerated	38,547	33,662

* Not separated in 1892. † Not rendered in previous year.
Statistical Office, Custom House, London, July 10th, 1893. T. J. PITTAR.

Food & Sanitation

With which is Incorporated Food, Drugs & Drink, The Public Analytical Journal & Sanitary Review.

VOL. II. No. 50.

LONDON: SATURDAY, JULY 22, 1893.

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Food and Sanitation.

SATURDAY, JULY 22, 1893.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

THE FRAUDULENT SALE OF FOREIGN FRUIT.

A PROTEST ON BEHALF OF BRITISH FRUIT GROWERS.
BY SAMPSON MORGAN.

At the present time a Committee of the House of Lords is sitting to receive evidence as to an extension of the Merchandise Marks Act for the purpose of protecting both the British producer and consumer from the fraudulent sale of foreign fruit. For many years I have persistently advocated an extension of the Act referred to, so as to include fruit and market garden produce, and as I have been making notes of the various frauds that have been perpetrated from time to time by the retailers especially, I take this opportunity of bringing these facts to your notice, satisfied that they will receive the publicity in your influential columns that they deserve. Only to-day, as I write, a friend informs me of the following case which came under his notice this morning within a mile of Scotland Yard. A gentleman purchased a pound of fruit which was labelled at eightpence per pound. The retailer had two lots on show, one at fourpence, the other at eightpence. After paying for the fruit, he happened to open the bag, and at once saw that although he had bought the best and had been served from the lot labelled eightpence, yet his bag contained fruit exactly similar to that marked at fourpence. He protested against the fraud, and insisted that he should be served with fruit from the front of the heap marked eightpence. The retailer refused to sell fruit from the front of the heap, "at any price," and the purchaser threatened to prosecute the trader. In the face of this threat the retailer compromised matters by giving a pound of superior fruit in exchange, which he had behind his counter, and thus the matter terminated.

I have no doubt upon the face of the fact disclosed that the majority, maybe all of your readers, will conclude that the retailer had simply cheated the buyer by substituting an inferior sample to that with which the heap was faced, and which the buyer expected to receive. But even though that would brand the retailer as a cheat, it by no means goes to the root of the evil. As the outcome of fifteen years' experience, let me at once disclose the full iniquity of the system. In the first place it is customary for certain retailers and the majority of them, too, to buy two grades or qualities of the one kind of fruit. Let us take tomatoes as a case in point. They buy at the market say ten cases of Spanish tomatoes. These are taken home and cleaned, and generally by the medium of a round blacklead brush and a bellows, the sawdust in which they are packed is in due course removed, and then, with the aid often of spittle and a duster, a polish is put on the fruit and it is ready for sale. The tomatoes are packed on a board, and the pile receives a facing of English tomatoes, a few of which in proportion to the "insipid foreign rubbish" have been bought solely for this purpose. Now not only is the consumer defrauded by this system of "facing," but the interest of the English producer is injured at the same time. Say the foreign trash costs twopence per pound first hand, whilst home-grown tomatoes are worth eightpence in the market, it is clear that any purchaser not able to tell the difference would not purchase tomatoes from one retailer, labelled English, at a shilling per pound, when he sees in another shop "faced-up" tomatoes, labelled as English, at eightpence. The consumer naturally buys at the cheapest shop, believing in the integrity of the trader; he buys what he believes to be English fruit at eightpence per pound, unconscious of the fact that before

his own eyes the retailer weighs him up cheap, trashy, foreign tomatoes from the back of the pile. It is a barefaced fraud in every sense of the word, often netting the fraudulent trader a profit of 200 per cent. One day last week as I passed along Fleet-street I drew the attention of a friend of mine who was with me, and who had had many years' experience of the foreign fruit trade, to Lisbon tomatoes piled up on a costermonger's barrow and labelled as "choice English tomatoes" at fourpence per pound, retail, too, whilst really choice English tomatoes were worth sixpence per pound, and more, *wholesale* in the market. I mention this case to show the extensive nature of the frauds perpetrated on English growers. These facts apply to most of the fruits grown, and I trust that their publication may result in the Legislature doing something speedily for the protection both of the producers and consumers of this country from the effects of the system condemned. Now with regard to the remedy, I would suggest (1) the appointment of an Inspector in every city; (2) that every retailer be compelled to label foreign fruit as foreign fruit, and to sell it as such; and (3) that the place of origin either be branded or stamped on every consignment that enters our ports from beyond the seas. The penalty must, however, be a severe one, otherwise the evil will not be met. An infringement of any legislative enactment in respect of the people's food should be severe. By having the consignments branded before they enter our ports, we safeguard the interest of the retailer, so that he cannot complain that such and such goods were sold to him as English, for the brand would appear conspicuously on every package.

No one in all justice can complain of the introduction of the safeguards I propose. No honest trader at any rate will, and if any protest is made, in spite of any qualification that my accompany it, the public will at once see it in its true light. It is time that the interests of the British fruit growers were safeguarded from such questionable tactics. Fruit growing, which should form a gigantic and lucrative industry in this country, especially from the fact that for the production of fruits congenial to our climate, we have the finest soil and markets in the world, is handicapped and crippled in the most wanton manner by preferential and excessive railway rates and market tolls, the latter, in plain truth, being a tax on food.

Handicapped on the one hand by railway and market monopolists, and defrauded on the other hand by a system which has spread to every city in the kingdom, how is it possible for the hard-working fruit farmer to hold his own against increasing imports disposed of, as I have shown in the majority of cases, by fraudulent sales? Will the Government recognize the importance of this question to all classes of the community? Will it see that the labours of the Committee do not, as the labours unfortunately of most Parliamentary Committees do, end in smoke? Will it deal with the fraudulent sale of foreign fruit in the speedy and drastic manner it deserves? If not, it has been decided that the lecturers of the National Fruit Growers' League will once again stir up every fruit-growing centre in the country this time, against the perpetuation of a system, which in one sense has been "legalised" by the trade, exclusively in the interest, and for the benefit of, the inferior and cheaper productions of the foreign grower.

ANNOTATIONS.

NUNEATON AND CHILVERS COTON LOCAL BOARD.

At the last meeting, Inspector Poulton reported that he had taken 12 samples of milk, 8 samples of whisky, and 21 samples of various groceries. One milk-seller had been prosecuted and fined £2 1s. 6d.

THE OLDHAM FOOD SUPPLY.

At their last meeting Councillor Stansfield drew attention to a minute stating that a Medical Officer of Health reported the result of the analysis of several samples under the Food and Drugs Act, one sample of whisky being adulterated with 8 per cent. excess of water. He wished to know whether whisky was the only thing found to be adulterated. (Laughter.) He would also like to know what other kinds of food had been analysed, and also how many of them were unadulterated. With regard to whisky, he thought the more water added the better. (Laughter.)

THE WEST RIDING OF YORKSHIRE COUNTY COUNCIL AND ADULTERATION.

At the last meeting, Mr. Anderton spoke of the advance that had been made in the administration of the Adulteration Acts. During the first five months of this year there had been 466 samples taken by their eight Inspectors, as against 219 during the corresponding period of last year. It was very satisfactory to know that they were making progress in this matter. There had not been a strong enough feeling in the county upon it, and it would be a great benefit to the inhabitants—especially the poorer inhabitants—if such a feeling were aroused. It was very essential that the poor should be able to get pure articles for the money they spent.

SIR PETER EDLIN AND SKIMMED CONDENSED MILK.

Sir Peter Edlin has for a long time performed his functions without any salary, his employers having a different appreciation of the value of that distinguished gentleman's services to the one he personally entertains. Judging by Sir Peter's decision in the condensed skim milk appeals reported in our present issue, we incline to the belief that his employers' opinion of the value of Sir Peter is even too high, and that he is dear at no salary whatever. It is pitiable to find judges so destitute of elementary education on foods, that limbs of the law with a bushel of pretentious ignorance and a grain of scientific knowledge, can hound them, as Sir Peter Edlin and Justices Day and Lawrence were hounded, but the pity is deepened when we reflect upon the fact, that the victims of this judicial ignorance are helpless infants, often thrust into their graves by worthless trash. A rate of infant mortality that is a disgrace to our country and our age, and ricketty, enfeebled, starved babies are the fearful prices paid for this lamentable judicial folly—a folly that has been condemned by nearly 7,000 representative medical men, including every physician of eminence, and that Local Government Board reports have commented upon in the strongest terms. As legal asininity, however, does not make a wrong into a right, it is to be hoped that grocers will avoid the skimmed condensed milk, unless it be labelled on the front of the tin Skimmed Condensed Milk in letters all equally large, and thus be a warning against its use for infants. The matter, however, must not rest at this stage. It is eminently one for the House of Commons Select Committee on adulteration that is expected to sit next session; and the fact should be strongly emphasised that it was only these stupid and dangerous quibbling decisions that prevented the skimmed milk manufacturers from properly labelling their milk, some of the largest having decided upon proper labelling, and only stopping doing so after the Day and Lawrence decision.

ALUM IN BAKING POWDER.

In an article "On the Action of Alum upon the Nervous System." The *British Medical Journal* says:—

"Hitherto, however, no attention has been directed to alum as a possible cause of nervous disease, and yet the symptoms it produces on the nervous system after its absorption into the blood are very remarkable indeed. They were apparently first noticed by Orfila, who found that when alum was given to a dog, and vomiting prevented by ligature of the gullet, death occurred, with symptoms of weakness and diminished sensibility, so that it was almost impossible for the animal to stand upright, and pinching and pricking caused no movement. The most complete series of experiments on the action of aluminium salts were made under the direction of Professor Hans Mayer by Paul Siem. These experiments showed that when administered to animals (dogs, cats, and rabbits) by subcutaneous injection, a soluble salt of alum causes no symptoms at all for three or four days.

"Then the animal suffers from loss of appetite and obstinate constipation, emaciation, languor, and disinclination to move. Next there is vomiting and loss of sensibility, as a deep prick with a needle is scarcely felt. When forced to move the leg is raised, but trembles and twitches violently, and is with difficulty placed on the ground. Sometimes there is general tremor or convulsive twitching, and sometimes there is extreme weakness or partial paralysis of the posterior extremities. There is complete loss of sensibility to pain, while the animal retains its senses. Then the power of moving the tongue and of swallowing is completely lost; even the saliva cannot be swallowed. The symptoms are precisely those which are observed in a disease occurring in man, and known under the name of acute bulbar paralysis. The cause of this disease in man is at present unknown, and the idea of its possible connection with the continued absorption of alum in the same way that lead palsy or mercurial tremor may be due to the absorption of lead or mercury is quite a new one. Much observation may be necessary in order to ascertain whether such a connection exists or not, but the disease is so dreadful, and its treatment so hopeless, that it is well worth while for physicians generally to try whether such a causal connection between the use of alumina and the appearance of the disease can be traced. It is probable that many medical men are unaware of the extent to which salts of alumina may be introduced into the body, because they are under the impression that the use of alum in bread is forbidden by law, and that, as this element hardly exists to any extent in any potable waters, they may consider that its introduction into the body is impossible. The notice which we have given in another part of this week's issue of the trial regarding the use of alum in baking powder, throws a new and by no means pleasant light upon this subject."

With regard to the recent trial at Swansea, the *British Medical Journal* says:—

"We refrain from making any further comment on the case at present, but, after the hearing of the matter at the Court of Appeal, we may have occasion to refer again to the subject, and more especially to the evidence given by the appellant's experts."

UNIVERSITIES, COUNTY COUNCILS, AND AGRICULTURE.

At a Conference on the relations of the Universities to the County Councils in regard to Technical Education, at Cambridge, Professor Liveing explained the Cambridge and Counties scheme of scientific instruction in agriculture. It was proposed that those who were preparing for farming should spend two years under the scheme. The student would be at Cambridge about half the year, and spend the other half in learning the practice of farming. It was estimated that any student for the whole course would have to pay the first year 19 guineas, and the second, 18 guineas in fees; and that for board and lodging the cost would be from £6 to £8 per term; so that the necessary expense on economical lines would be from £38 to £44 per annum for the whole course. Students from non-contributing counties would have to pay double fees. Some of the students would undoubtedly remain to go through a University career, and for land agents and gentlemen who managed their own estates there would be offered something to interest and benefit them in after life. Mr. Albert Pell said he believed that they had at last turned to the most hopeful and most reasonable aid to agriculture. The farmers would derive enormous benefit from the scheme; but there was one class of men—who, to his mind, of all classes were the most interested in the subject—who had been the most indifferent in acquiring instruction and education necessary for the successful management of the enormous wealth and property to which they were heirs. He meant the landlords of England and their sons. It would be a grievous thing if, when all this machinery was started, the last to take advantage of it were those men who were certain to be the possessors of a very large portion of the land of our country in the future. The scheme was also supported by Mr. A. E. Brooke-Hunt, Inspector of the Board of Agriculture; Mr. E. Clarke, Secretary of the Royal Agricultural Society, Mr. A. Sperling, Chairman of the Cambs. County Council, and others. The conference afterwards had a discussion upon the question of the classes and laboratory work for elementary teachers.

LIMERICK AND THE FOOD AND DRUGS ACT.

At the meeting of the Limerick Grand Jury, Mr. Connolly asked, in connection with the presentment for £50 for probable expenses under the Weights and Measures Act, that the Grand Jury would give general authority to their Secretary or the County Inspector of Police to appoint a new Inspector under the Food and Drugs Act in the case of the officer being transferred as frequently occurs. There being no objection, the application was granted.

MORE CONDEMNATIONS OF CAMERON, M.P., AND HIS FOOD AND DRUGS ACT AMENDMENT BILL.

The British Dairy Farmer's Association at their last meeting, took into consideration Sir Charles Cameron's Bill to Amend the Sale of Food and Drugs Act, 1875, and the Margarine Act, 1887. It was resolved, on the motion of Professor Long, seconded by Mr. Stapleton, that in the opinion of the Council the Bill is inefficient for the purpose of preventing the sale of margarine as butter, and does not deserve the support of the dairy farming community. Which is a very sensible conclusion on the part of the dairy farmers.

SIR CHARLES A. CAMERON AND THE COUNTY MONAGHAN GRAND JURY.

Some authorities seem to delight in doing surly, sore-headed, ungracious acts. Of such is apparently the County Monaghan Grand Jury. At their meeting on July the 5th, the following letter was read by the Foreman:—"To the Grand Jury of the County Monaghan.—Mr. Foreman and Gentlemen, I would feel obliged by your appointing my son, Edwin Douglas Cameron, Public Analyst for the County Dublin, an additional Analyst, without salary, for County Monaghan. The County Analyst's work has of late greatly increased, and my son is now associated with me. If you appoint him it will make his certificate conjointly with mine evidence in cases of adulteration. As the appointment would entail no expense to the County, and would tend to expedite my work, I trust you will be pleased to grant my request. Under the provisions of the Food and Drugs Acts, you are empowered to appoint any number of Public Analysts.—I am, gentlemen, your obedient servant, Charles A. Cameron."

The Grand Jury were of opinion that one Analyst was sufficient, and refused to make the appointment.

DAIRYMEN AND WARRANTIES.

We are pleased to see our opinions upon "warranties" endorsed by the representative journal of one class for whom the warranty was supposed to be designed. The *Cowkeeper and Dairyman's Journal*, for July, says of warranties:—

"They do not seem to exercise a very strong controlling influence over the conscience of either dairyman or farmer, for adulteration continues to flow, and the warranties are offered as a set-off. I think the warranties are unjust to the farmer, and a failure to the dairyman."

Our contemporary is quite right. The honest man does not want the "warranty," but it is many a thief's salvation, and his shield in plundering the public and bringing disgrace upon an honourable calling.

MORE POISONING BY TINNED MEAT.

The majority of a picnic party from a public-house, near Queen's-park, Manchester, to Disley, in Derbyshire, were poisoned, a fortnight ago, by some tinned tongue which had been supplied for tea. Several recovered, but twelve were extremely ill, and in one or two cases serious consequences are anticipated.

CANTERBURY AND ADULTERATED MILK.

At the last meeting the City Analyst presented his report relative to four samples of milk which had been submitted to him. From this it appeared that three of the samples were "genuine," while the other contained 11 per cent of added water. Proceedings were ordered to be taken.

LAUNDRIES AND THE SPREAD OF INFECTIOUS DISEASE.

Harry Andrews, the keeper of a laundry, of 39, Holmes-road, Kentish Town, was summoned by the St. Pancras Vestry at Marylebone on the 27th ult., for having on the eighth of May last, while suffering from diphtheria, wilfully exposed himself in the street and in his shop without taking proper precautions against the spread of the disease.—Mr. Ricketts, solicitor, who was for the prosecution, said the defendant was unwell in the early part of May, and was attended by Dr. Brown, of Bartholomew-road, Kentish Town, who sent a certificate to the Vestry stating that the defendant was suffering from diphtheria. Mr. Hartnell, Sanitary Inspector, called at the defendant's house on the 5th ult., and ascertained that about a dozen women were employed there. He also went on the following day and found that the defendant was not isolated, and that his wife was attending to him. A notice was served on defendant warning him, and on the 8th the place was disinfected. The drains of the house were imperfect, and the defendant was seen in the works. Ordered to pay a fine of £1, with £2 10s costs.

THE RAILWAY COMPANIES AND MILK.

At Tottenham Petty Sessions, on June 19th, William Crawford, Ponders End Farm Dairy, South-street, Ponders End, was summoned for selling milk adulterated with 10 per cent. of added water. Mr. Tomlin, Inspector under the Food and Drugs' Act, proved the case. Mr. Avery, who appeared for the defendant, said that the milk was sold as delivered to defendant under an agreement by the original purveyor to send him pure milk. Mr. Tomlin, in reply to a question, said he had previously taken several samples of defendant's milk and never had a case against him before. Mr. Avery added that unfortunately the contract for the supply of milk was not in a form that constituted a guarantee such as would be sufficient for a defence under the Act. He called as a witness a man in the employ of the defendant, who swore that the milk was sold in the same condition as it was received at the Ponders End Railway Station. The churns were not locked but the lids were fastened up with a piece of wire. In the course of further observations it was elicited that the Railway Company would not allow the milk to be sent in cans that were locked as they required to measure it; and, therefore, there was nothing to prevent adulteration by some of the Railway Company's servants while the milk was in transit. The Chairman said there must necessarily be a conviction, and a fine of 5s. and costs would be imposed. He thought milk vendors and purchasers should associate together if possible for the purpose of getting the Railway Companies to adopt some other method of measuring so as to allow the cans to be locked while in transit. There was no reason why it should not be done by weight or in many other ways. While the Railway Companies did not allow the cans to be locked, it threw considerable suspicion on their officials.

ESSEX COUNTY COUNCIL.

Mr. T. A. Pooley, the County Analyst, presented his quarterly report as follows:—

During the last three months 178 samples of food, &c., were brought to me for analysis from different districts; 17 of these or about 9½ per cent. were certified by me to be adulterated. The average quality of the articles submitted to me thus continues to improve, and it is only in the Metropolitan portions of the county that any considerable number of cases of adulteration are detected. It is satisfactory to be able to record that out of the large number of samples of butter analysed last quarter, only four were reported against, and these were all cases of substitution of margarine for butter. Some improvement is also shown in milk, but still this continues to be adulterated more than any other article. The other cases of adulteration were the mixture of chicory with coffee, the excessive dilution of gin, and the use of copper in preserved peas; in the last-mentioned case, the quantity of copper detected was very minute (only about 0.004 per cent.), but the practice of adding a poisonous metal to an article of food is much to be deprecated, and I am of opinion that under some circumstances even this small proportion of copper would be injurious to health, although I am bound to admit some medical authorities have expressed a contrary opinion.

A PUBLIC ANALYST FOR GOVAN.

The Govan Police Commissioners, at their monthly meeting on July 10th, agreed to a recommendation of the Sanitary Committee to appoint Mr. R. R. Tatlock, Analytical Chemist, Glasgow, as Analyst to the burgh under the Foods and Drugs Act. We are gratified to find like encouraging signs increasing. We hope Govan will see that the appointment is not a sinecure, and that plenty of samples of butter, lard, vinegar, cocoa, milk, etc., will be taken for analysis.

CHISWICK AND SANITATION.

Our issue of June 24th contained some queries put by a Mr. Waters of the Chiswick Local Board, as to the condition of the Glebe Estate by which the responsibility for the insanitary state of that property was in some degree sought to be fastened upon the Medical Officer of Health and Sanitary Inspector. From enquiries it seems to us that the Chiswick Local Board scarcely give that real help to Medical Officer or Inspector which would enable those officials to effectively cope with scandals such as those which Mr. Waters stigmatised as "a scandal not only to Chiswick but to civilisation." As an instance, we find on referring to the last report of Mr. F. C. Dodsworth, Medical Officer of Health, that whilst London's zymotic death rate was 2·8, Chiswick had 3·9 per cent. The deaths were:—

Scarlet fever	1	Puerperal fever	1
Diphtheria	3	Measles	34
Croup (Membranous) ..	1	Whooping cough ..	27
Enteric fever	2	Diarrhoea	20
Continued fever	1		

Of these diseases Mr. Dodsworth says:—

Whooping Cough.—This complaint assumed epidemic proportions during January, and existed more or less for the first six months of the year. No doubt the mortality from this disease was greatly accelerated by the severe weather of the early Spring. All the deaths were of children under five years of age.

Diarrhoea.—Was especially prevalent during the summer months July and August. All the deaths occurred in children mostly under a year.

But it is with respect to the large percentage of deaths by measles that the Medical Officer's report affords a means of understanding the Chiswick Local Board.

"Measles.—This disease prevailed, especially during the months of April, May, and June, causing 34 deaths; it is not included under the Notification Act in this district, being at present only notified by a few of the large towns, such as Coventry, Jarrow-on-Tyne, and some others. Considering the magnitude and fatality of epidemics of this disease of late years, the subject is one of great importance. It is a complaint which has entirely changed its type: from being regarded as a trivial disease, it has been recognised as one of the most dangerous we have to deal with, by reason of its frequent complications with diseases of the pulmonary organs, and equally so as an originator of other diseases, such as tuberculosis, which is a very general and common sequel. In this parish, during the past ten years, it has proved the most fatal of any of the diseases of the zymotic class. I might remind you that last July I gave you a special Report on the subject of the Notification of Measles. It was however decided by your Board not to include it under the Act."

If anything were needed to point the moral as to this carelessness of the Chiswick Local Board it would be found in the following by Dr. Theodore Thomson, Local Government Board Inspector. "Measles," says Dr. Thomson,

"Has an incubation period of 12 days. In searching for the cause you should make careful inquiries about its prevalence in the neighbourhood and in schools, and more especially so because you do not get so much information about measles from compulsory notification. In the first place it is not generally included in the notifiable diseases list, and often in those districts where it is so included cases fail to be notified, because of no medical attendant being called in. As regards prevention there is little to be said. It is very difficult to effect isolation for two reasons: one that the disease is so very infectious, and the other is found in the singular apathy of parents in regard to measles, although it is a disease that causes an enormous mortality each year. Of all the diseases I am dealing with to-day the two that cause the greatest mortality are measles and whooping cough, and they are also the two that parents pay least attention to. If you can get the first case sent to the hospital, you may then prevent an epidemic. Schools, and especially infants' schools, are sometimes closed to prevent spread of the disease through a district.

"I often think it would be an uncommonly good thing for the British public if we had given measles a grand name like morbillary fever or something of that sort. You may have noticed that if the public think they are dealing with a case of scarlet fever they are more particular than if they believe it to be scarlatina, although these two names represent the same disease; and if we were fortunate enough to have another name for measles it would be an excellent thing."

The only inference we can draw from our inquiries is that the Chiswick Local Board ignore the evils pointed out by their officials, expect them to make bricks without straw, and proceed to make damaging innuendoes as to their capacity or energy the moment the insanitary conditions fostered by the Board's carelessness arouse public indignation. It seems to us, as impartial critics, a course contemptible, short-sighted, and unworthy, to tie men's hands, and then maliciously impute blame to them for not doing what they—the Board—make it impossible that the officials could do. The Sanitary Inspector also we find has only held his office twelve months, and had already presented to the Board a report on the sanitary condition of the Glebe Estate, as follows:—

As it is proposed to make an house-to-house inspection amongst the working classes, and knowing that the house drainage, especially on

the Glebe Estate is open to very grave suspicion, I feel it my duty to point out a few important facts in connection therewith.

Having tested the drains of 19 houses in succession, in Binn's-road, and at other parts of the "Glebe," and finding each one more or less defective, it will be quite unnecessary to point out the need of a thorough inspection of that part of the district, for example, at No. 14, Binn's-road, where a case of scarlet fever occurred. I found that the drains had for some time past been leaking beneath the floors, which when opened up the stench was quite unbearable.

The work of the usual superficial inspection differs greatly from the work I propose to carry out, and does not include an examination of the actual drainage.

I have taken the liberty to issue this report in order to point out the responsibility of my position, if, after additional help has been afforded me, and a mere superficial inspection made, to find hereafter that illness may be attributed to defective drains, or that the situation of a cistern is the immediate cause of complaint, that my inspection is to be condemned and rendered incomplete.

I am asking the Committee in my next report to take the matter into consideration, as it is for the Board to decide whether such an inspection is necessary, if so, it will, I am sure, necessitate the relaying of a great many house drains and the removal of drinking-water cisterns which in their present position cannot be passed as fit and proper receptacles for drinking water, consequently it will entail considerable expense on the owners.

It is obvious that the existing drains must be sooner or later rectified, and no greater kindness can be attributed to the Board than to make the homes of the working classes healthy by efficient drainage.

In consideration of the appointment of an Assistant Sanitary Inspector, I have every confidence in the Board appointing a candidate who is capable of superintending drainage, and who may be relied upon to assist one in a thorough and efficient manner.

In conclusion, I cannot conscientiously carry out a mere superficial inspection without reporting fully my convictions with regard to it, much less take over the responsibility without definite instructions from the Board.

JOHN H. CLARKE, Sanitary Inspector.

Following this preliminary warning the Sanitary Inspector examined the drains in the scarlet fever area, and reported:—

At Binn's-road the test has been applied to each of the drains, and each one more or less indicated defects. The drains at 14, 36 and 38, on being exposed for inspection were found to be choked with solid matter, and disjointed. The joints had evidently been made of clay. Many of the pipes had a reverse fall, and the disconnecting traps between house drain and sewer were also defective. I need hardly say that no concrete had been used for imbedding the pipes as required by the Board's bye-laws.

It is, however, impossible to determine the exact state of the drains without the ground being opened in some cases, and I believe the Board, at their last meeting, gave instructions for this to be done where required.

At Wood-street the drains were traced to a series of cesspools, which were quite full and within three inches of the surface, and covered with wooden slabs. The size of the cesspools being 4 ft. in diameter and 8 ft. deep.

It appears that each cesspool overflows into another, and ultimately into the public sewer. The existing drains were defective, and also the waterclosets. This refers to Nos. 20 to 30, and I would recommend that these cesspools be at once emptied and done away with. New drainage should be constructed throughout.

Our readers, we feel sure, will be able to form their own opinions on these facts as to who is to blame for the condition of things described by one member of the Board as "a scandal, not only to Chiswick but to civilisation."

BROUGHTY FERRY POLICE COMMISSION AND A PROPOSED PUBLIC ANALYST.

At the last meeting a discussion arose regarding the quality of milk during the question of the licensing of a dairy, and it was suggested that the milk should be analysed. It was pointed out that the County Council had an arrangement with an Analyst on very moderate terms, and they might consult him regarding not only the analysis of milk but of other articles sold in the burgh. The proposal was agreed to.

SOUTHPORT SHRIMPS FROM HOLLAND.

At a meeting of the Southport Town Council, on July 11th, the Mayor (Mr. W. Hulme) presiding, Mr. Threlfall alluded to the evidence which had been given before the Royal Commission in the House of Commons to the effect that quantities of shrimps were regularly sent from Holland to Southport, and sent out again as Southport shrimps. Some serious statements had been made to him that Dutch shrimps were potted in Southport, and sent off to Manchester and other places, where they were labelled as "Southport shrimps." He trusted that the Health Committee would take some energetic steps in the matter. The Mayor called Mr. Threlfall to order on his making further references to the Dutch shrimps, that not being a matter on the minutes. After protesting, Mr. Threlfall left the Council-chamber. The Chairman of the Health Committee (Alderman Rimmer) said the Health Committee were doing all that lay in its power to protect the people.

CONDENSED SKIM MILK APPEAL.

At Clerkenwell Sessions, on July 8th (Sir P. Edlin presiding), Catherine Rudsell, grocer, Kensington, appealed against a conviction of Mr. H. C. Bennett, at the West London Police-court, by which, on March 23 last, she was fined £5 and 12s costs, for selling condensed milk without informing the purchaser that a quantity of fat had been abstracted from it. Mr. Grain was for the appellant, and Mr. Dennis appeared for the local vestry. Mr. Grain said he had understood that the case was to rest on the decision of Mr. Justice Day in a similar matter recently disposed of in the High Court. Sir P. Edlin: In that case we could not hear argument upon it here. Mr. Dennis said that in the High Court it was held that the article sold was skimmed milk, though the tin said it was condensed milk, with a line elsewhere saying the milk was skimmed. The Court went on the label, and said that was sufficient notice. Sir P. Edlin had not understood that the case was to be argued in this Court. Mr. Dennis answered that the milk in this case was admittedly altered so as to be injuriously affected, but it was sold with a label which said it was condensed milk. The cream was abstracted not in the regular way, but by means of a centrifugal separator, which extracted about 90 per cent. of the cream, whereas in skimming only about 70 or 75 per cent. of the fat was abstracted. This was a different case altogether from that heard in the High Court last month, and the milk was not the same, nor of the same quality. Sir P. Edlin examined the labelled tin, and said the words "condensed milk" were very conspicuously printed in red capitals. The label also said the article was prepared only with pure sugar, and further that it was "skimmed condensed milk" of the "Drummer Boy brand." There was also the French word *écramé* on the label, which was perhaps the strongest word that could have been used to describe what was meant. Was the milk sold as a pure article? Mr. Dennis: We do not say that, but we contend that the label would be sufficient notice and guide if the thing sold were skimmed milk, but in this case it is separated—not skimmed—milk, and of the worst quality. And the French word *écramé* would not be any notice for English purchasers, who cannot be expected to be all French scholars. The view of the Kensington Vestry is this: that skimmed milk is well-known to the people and to analysts; so is separated milk. But to sell separated milk as skimmed milk is to vend an inferior article to the one named. Sir P. Edlin: You say there was a more complete separation of the fat in this case than in mere skimming. Mr. Dennis replied in the affirmative. Sir P. Edlin: Then it is a question of degree, and we must deal with it as such. Mr. Dennis repeated that in skimming it was possible to extract only about 70 or 75 per cent. of the fat from milk, which elicited from Mr. Grain the remark, "Oh, nonsense!" He continued that before this case was adjourned a short time he had thought the case in the High Court might assist them, but it had not done so. Mr. Dennis remarked that he had evidence to prove that in skimming only from 70 to 75 per cent. of the cream was abstracted, but in this case, by means of the centrifugal separator, over 90 per cent. of the fat had been extracted from the milk, albeit the article was described on the tin as "condensed skim milk." In answer to the judge, Mr. Grain said he did not assert that the article in question was different from that which came before Mr. Justice Day in the High Court—it was done by the separator, and he should have thought after the decision in the High Court that the other side would not have thought of fighting this case out, especially after the understanding they arrived at before the adjournment. Sir P. Edlin: Yes, what we have to settle is whether the cases are not of the same character—whether this case should not be governed by the one disposed of by Mr. Justice Day. Mr. Dennis submitted that the cases were entirely different, adding that that was the view of the Vestry. Sir P. Edlin: I think the judgment of the High Court is sufficient to cover this matter. Mr. Dennis: It is clearly a separate issue. Sir P. Edlin: I say there is no substantial difference between this case and the one tried by Mr. Justice Day last month; and besides, I have a distinct recollection that the arrangement was that this case should rest upon the other in the High Court. Mr. Dennis here intimated that after what had been said he did not intend to pursue the matter further. The appeal was then allowed with costs.

On July 8th, at the Petty Sessions, James Caley, of West Ealing Dairy, was summoned for having sold milk which was not of the nature and substance demanded. The taking of the sample was proved. Inspector W. Tyler said that on the 21st June he received the sample, which was divided in the usual way, one portion being sent to the Public Analyst, who added that water was added to the extent of 6 per cent. Mr. G. W. Lay appeared for the defendant, and in reply to him witness said he had taken many samples of the defendant's milk and found them good. Six per cent. was not a great percentage, and recently there had been complaints as to the scarcity of milk. Mr. Lay said that the defendant sold the milk as he received it, and he could not understand why that was so. Under the circumstances of his past career, it was hoped he would have to pay costs only. The Bench ordered payment of costs.—Henry Draper, of 22, Felix-road, Ealing Dean, was similarly summoned. Mr. G. W. Lay admitted the facts. Mr. Tyler proved that the adulteration was certified to be 10 per cent., and said that this was the first sample he had taken from this shop. Mr. Lay said that the defendant bought a little milk from three different people, and put it on his counter just as he received it. Fined 20s. and costs.—Emma Stone, of 23, Williams-road, Ealing Dean, was similarly summoned, the adulteration being certified at 24 per cent.—The facts were proved by Inspector Tyler, who added that the defendant supplied a poor locality. The defendant was fined £3 and costs, and allowed to settle by instalments. Joseph Cook, of the

Broadway, Hanwell, was also summoned in a similar way, the adulteration here being 10 per cent. Inspector Tyler proved the facts, and said that every quarter he took samples of the defendant's milk, and this was the first time it was found to be wrong. Replying to Mr. Barber, the Inspector said that it was admitted that this was a poor time for milk owing to the drought. The defendant strenuously denied having added water, but was fined 20s. and costs.—John Ayriss, of Boston-road, Hanwell, was also summoned for having sold milk to which 10 per cent. of water was added. The Inspector said that since the defendant was summoned, he (defendant) had called on witness and made a statement as to the supply to himself. In consequence of that witness went to defendant's shop, and took a sample of milk as delivered from the farmer, and it was now before the analyst. The summons was adjourned pending the receipt of the certificate in the second case.—George Armstrong, of the Broadway, Hanwell, was similarly summoned, the adulteration being certified as 10 per cent.—The defendant did not appear, and the facts having been proved, was fined 20s. and costs.

At Swindon, on July 13th, Inspector Ward had a busy day. He first summoned Albert Charles Buckledee, of the Okus Dairy, Swindon, for milk adulteration. Mr. H. Bevir prosecuted on behalf of the Wilts County Council, and defendant was legally represented. Mr. Ward said on his instructions his son purchased some milk from a man named Samways in King John-street, Swindon, on June 18th, which was a Sunday. The report of the Analyst showed that the milk contained 89.17 per cent. of water, 2.85 of fat, and 7.98 of solids, not fat. The sample contained 12 per cent. of added water. James William Ward, son of the Inspector, proved purchasing the milk of defendant's man, whom he paid 1½d. for a pint. Defendant said he took to the Okus Dairy in May, and was supplied from two sources, but it was impossible to trace that from which the milk in question was taken. The magistrates inflicted a fine of £1 and £1 11s. costs.—Arthur Balch, of Prospect Dairy, Swindon, came next, for selling milk which contained 13 per cent. of added water. A solicitor appeared for the defence. Mr. Ward said he sent his son to purchase some milk from defendant, who was selling in Devizes-road. His son was not able to obtain any, and defendant got into his trap and drove away. Witness, however, stopped the horse, and at his request defendant supplied him with a pint of milk, a sample of which the County Analyst reported to contain 13 per cent. of added water. Defendant, sworn, stated that he bought milk from Mr. Cox, whose man, on the morning in question, brought in the milk and transferred it direct to his (defendant's) churn, which already contained a gallon left over from the previous night. He sold the milk exactly as he received it. Defendant explained that his refusal to sell the milk to young Mr. Ward was due to the fact that he had none to spare. He knew Mr. Ward, sen., and let him have some milk. Cross-examined: The gallon of milk in the bottom of the churn had been in the dairy, and boys in witness' employ had access to it. Charles Heath, in Mr. Cox's employ, spoke of delivering the milk to Mr. Balch. He did not see whether the latter's churn was empty when he transferred the milk to it. Fined £1 and £1 10s. expenses.—Then William Hugh Smith, of Horpit Farm, Wanborough, was summoned for selling milk with 10 per cent. of added water. Mr. A. E. Withy defended. Mr. J. W. Ward, the Inspector's son, proved purchasing a pint of milk from a boy for 1d.; he asked for new milk. The Inspector, in cross-examination, said he had taken a sample from Mr. Smith previously, and that was good. Re-examined: Two further tests had been made of the milk supplied to Mr. Smith for sale, and both had been found to be pure. For the defence Mr. Withy commented on the fact that 10 per cent. of added water was very near the margin where Public Analysts were unable to say yea or nay as to its quality. Defendant's reputation had always been good—so good, in fact, that if he were fined he understood his customers were prepared to pay the money. Defendant's servant was in the habit of leaving his churn in Commercial-road while he sold from a bucket, and he suggested that while it was left someone stole the milk and replaced it with water. Defendant, sworn, denied that he tampered with the milk in any way, and his servant said he was in the habit of leaving the churn for a quarter of an hour or 20 minutes at a time. A bailiff in the employ of Mr. Kemble, who supplied defendant with the milk, said in consequence of the dry weather milk was of inferior quality. Fined 10s. and £1 13s. costs.—Edward Gough, milkseller, of Newport-street, Swindon, was summoned for selling milk from which 27 per cent. of cream had been abstracted. Defendant's daughter, who was on a round, sold a pint of milk to Mr. Ward. Defendant pleaded the badness of the season in mitigation, saying he had been obliged to feed his cows on grains. The Bench thought the case a very bad one, and fined defendant £2 10s. and £1 8s. costs.

At Newport, Robert Woodman, milkman, 54, Archibald-street, Maidee, was summoned for selling adulterated milk. Detective-Sergeant Faulkner purchased a pint of milk from Woodman on the morning of the 22nd ult., and the analysis showed that it contained 14 per cent. of added water. Defendant stated that he had sold the milk as it was supplied to him. He sold about 14 gallons of milk per day. Mr. A. A. Newman, Town Clerk, who prosecuted, said that the 14 gallons would contain two gallons of water. The Bench told the defendant that if he did not obtain a warranty from the farmer supplying him with the milk he was responsible, and a fine of 40s. and costs was imposed.

At Edmonton Petty Sessions, Benjamin Bailey, High-road, Tottenham, was summoned by Inspector Tomlin for selling milk adulterated to the extent of 8 per cent. of water, on June 4th. The Analyst's certificate showed that adulteration to the extent of 8 per cent. of added water had taken place. A fine of 20s. and costs was inflicted.

At Westminster, on July 7th, Henry W. Munsen, of Simpson-street, Battersea, trading as the Farmers' Milk Company, appeared to an adjourned summons, before Mr. Sheil, for selling milk adulterated with water. Mr. Ricketts, solicitor, took an objection to the summons that it did not disclose any particulars of the alleged offence as required by the 10th Section of the Act of 1879. Mr. Sheil decided that the objection was fatal. The summons which the parish had taken out was thoroughly bad in form. Mr. F. Smith, for the Vestry of Chelsea, asked that the summons might be amended. Mr. Ricketts objected, and applied for costs against the Chelsea Vestry. Mr. Sheil: I will give you nothing more than the law allows. You have the benefit of the objection, but you will not get costs. A discussion ensued as to whether the parish could obtain a fresh summons against the defendant, and ultimately one was granted, though Mr. Ricketts said that he should argue that the whole matter was *res judicate*.

At Dublin, on July 7th, Inspector John Hickey, of the Corporation Food Inspection Department, prosecuted Margaret Dwyer, 72, Baggot-street, for selling buttermilk adulterated with 25 per cent. of added water, and she was fined £3. Rosanna Freney, 13, South King-street, charged with adulterating new milk with 21 per cent. of water, was fined £3. James Finlay, 1a, York-street, for adulterating new milk with 10 per cent. of water, was fined £1. Edward Loney, 41, Stephen-street, charged with adulterating buttermilk with 20 per cent. of water, was fined £2.

Inspector Timothy Lyons, of the Corporation Food Department, prosecuted Anne Murphy, 18, North Gloucester place, who was fined £3 for selling buttermilk adulterated with 50 per cent. of water. Patrick Grogan, 39, Amiens-street, was fined £3 for selling buttermilk adulterated with 40 per cent. of water. Esther Alpin, 34, Great Charles-street, was fined £1 for selling buttermilk adulterated with 20 per cent. of water. Inspector James Green prosecuted Peter O'Toole, 21, Upper Abbey-street, for selling new milk adulterated with 11 per cent. of water, and a fine of £1 was imposed.

At Melksham Petty Sessions, on July 7th, before Messrs. W. B. Lee and H. H. Ludlow Bruges, William Lewington, milk seller, was charged with selling milk, on May 28th, from which a quantity of the cream had been extracted, without giving notice to the prosecutor. The Bench convicted and fined him £5, and costs, £1 14s.; in all £6 14s. This he refused to pay, and was consequently removed in custody, the alternative being one month's imprisonment.

At Edmonton Petty Sessions, on June 29th, Keziah H. Cress-hull, The Dairy, Clyde Road, Tottenham, was summoned for selling milk adulterated with 10 per cent. of water, and was ordered to pay a fine of 20s. and costs, or in default 14 days.

SOMERSET HOUSE APPEALED TO.

Thomas Estcourt, Norfolk Dairy, High Road, Tottenham, was summoned for selling milk adulterated to the extent of 6 per cent. of added water.—Mr. Moore appeared for the defendant, and asked that the milk might be sent to Somerset House to be analysed again.—The Bench consented to this course being followed.

At Birsley Petty Sessions, James Augustus Hancock, of Uley, was summoned under the Foods Adulteration Acts. P. C. Wakefield, of Kingscote, deposed: On May 26th I purchased a pint of milk from the defendant while he was delivering milk in Dursley. I told him I intended to have it analysed by the Public Analyst. The witness handed in the Analyst's certificate, which was to the effect that the milk was adulterated with water to the extent of seven per cent. Mr. Hancock strenuously denied that he had adulterated the milk. He brought it into the town just as it came from the cow. He never adulterated it or authorized anyone to do so. He was in the habit of leaving one of his tins in Silver-street, and the milk may have been adulterated in his absence. Capt. Graham: If anyone adulterated the milk you have to bear the blame. Defendant: I am sure I did not. The police have had my milk on several occasions and there has been nothing the matter before. Superintendent Hopkins said defendant was a most respectable man. Fined 10s. and 17s. 6d. costs.

At Coventry Divisional Sessions, on June 23rd, George Edwards, Hollybank-farm, Foleshill, was summoned for milk adulteration. Mr. Masser defended. Mr. G. H. Salmons, County Council Inspector, said he obtained a pint of milk from defendant's son, on May 29th. The sample sent to the Public Analyst was found to be deficient of fat by 25 per cent. By Mr. Masser: He was instructed to take samples in the Foleshill district because none had yet been submitted to the Public Analyst. Mr. Masser, for the defence, contended that no cream had been abstracted. The deficiency could only be accounted for by the shortness of keep, the hot weather, and the milk supplied being at the bottom of the churn. Defendant and his son denied that the milk had been tampered with. The Bench said in face of the Analyst's certificate they had nothing to do but convict, but believing defendant had no intention to defraud, he would only be fined 5s. and costs.—Tom Pearson, milk dealer, Lockhurst-lane, was summoned for a similar offence. The certificate showed that the deficiency was 40 per cent. of natural fat. Fined 10s. and costs.

At East Grinstead Petty Sessions, on June 26th, Rose Brace, Glen-Vue-road, East Grinstead, was summoned for selling as new milk from which 40 per cent. of butter fat had been extracted, at East Grinstead, on June 2nd. Defendant was represented by Mr. E. A. Head. Mr. John Conrad Raw, Inspector under the Food and Drugs Act, proved the case. He produced the certificate of the Public Analyst, showing that the milk was deficient in butter, by the abstraction of 40 per cent. of butter fat or cream. Mr. Head contended that the case failed, as no mention was made in the Food and Drugs Act; also on

the second point that no authority for the proceedings was produced. The case was adjourned for a time to allow Mr. Raw to get his authority, which he subsequently produced to the satisfaction of the Bench. The Chairman said the offence probably arose from inadvertence, but defendant was responsible, and they must inflict a fine of 5s. and 12s. 6d. costs.

At Widnes Petty Sessions, James Gildea, Lugsdale-road, was summoned for having sold adulterated milk. Police Constable Thomas said that on the 14th June, he purchased a pint of milk which he afterwards took to the Public Analyst at Liverpool. Superintendent Keighley produced the Analyst's certificate, which stated that 8 parts of water had been added to every 100 parts of the poorest milk. Defendant said he had only just brought the milk from the station and had only served two customers. Mr. Deacon: Didn't you test the milk? Defendant: I don't know anything about it. I have not been in the business long: Mr. Deacon told defendant he had rendered himself liable to a fine of £5, but as this was the first case against him he would be let off with a fine of 20s. and costs, altogether £2 1s. 6d.

In Edinburgh City Police-court, on July 5th, Alexander Barclay, Davidson's Mains, pleaded guilty to having sold 2d. worth of sweet milk "not of the nature, substance, and quality of the article demanded." The analysis of Dr. Falconer King showed that the proportion of fat in the milk was 2.01, and the agent contended that by some authorities milk was held to be good enough which contained 2.4 of fat, and in this case the proportion was not much less. Sheriff Orphoot pointed out that according to the report of Dr. Falconer King the milk had been deprived of about one-third of its fatty constituents, and he was afraid he must deal with the case on the terms of that report. He imposed a fine of £1, with the alternative of five days' imprisonment.—At the same court John Rodger, in Raeburn-place, Edinburgh, pleaded guilty of a similar offence. The Analyst's report showed that one-sixth of the fatty matter had been abstracted, the amount of fat being 2.38. Sheriff Orphoot pointed out that it was the business of the accused to see that he got the milk in what might be called a legal condition—such that he could legally sell it—and to do so he could obtain a certificate from the wholesale dealer as to its quality. The agent for the accused admitted that that had been neglected, but having given an undertaking that it would be attended to in future, the accused was dismissed with an admonition.

Walter Alexander Bendall, dairyman, was summoned at Cheltenham, on June 29th, for selling adulterated milk. The Analyst's certificate showed that the fat of some milk, purchased from defendant's shop at 2d. a pint, had been extracted to the extent of 35 per cent. Mr. H. Lewis, for the defendant, set up the defence that the customer had been supplied with what he asked for—viz., a pint of milk, and that no offence had been committed. He did not ask for unskimmed milk, but simply milk. He (Mr. Lewis) quoted a case in which the High Court had upheld the decision of a magistrate in dismissing a case under similar circumstances; and upon this point the Bench dismissed the case against Bendall.

At Folkestone, on July 5th, William Sharp, milkseller, was summoned for selling milk adulterated with 12 per cent. of water. The Inspector bought the milk of a lad in the employ of defendant, named Charles Fisher, who was delivering it from a can in Radnor Bridge-road.—Defendant said his nephew, who lived in Hawkinge, brought the milk to him for sale, and he (defendant) sent it out exactly as he received it. Defendant called an elderly man named Edward Pinn, who said he farmed some land at Hawkinge. Mr. Sharp took the whole of his milk. On the occasion in question he put in a little water to make up the necessary quantity, as the cows were getting short through the drought. The magistrates found that Sharpe was liable, and fined him 10s. and costs.

At Leeds, on July 11th, Wm. Vicars, 23, Glew-place, Marshall-street, Holbeck, was charged before Mr. Bruce, at the City Police-court, with having sold, on June 16th, a pint of milk which the City Analyst certified to contain at least 16 per cent. of added water. Mr. Peckover prosecuted on behalf of the Leeds Corporation. Defendant had been previously convicted, and was fined £5, including costs, or one month. Mr. Walker, Food Inspector, proved the case.

At Wolverhampton, on July 14th, Elizabeth Tomkiss, milk seller, of 103, Horseley Field, was charged with selling adulterated milk. Samuel Blanton, Inspector under the Food and Drugs Act, stated that on Sunday morning, June 11th, he went to the defendant's shop and asked for a pennyworth of milk. The defendant's daughter went to the door and took the jug from him, but after he had waited some time, a boy went to the door, and said, "We've got none." Thinking there was something suspicious, he went into the house, and said he wanted no nonsense, but wanted milk, if they had any, as he saw a woman being supplied with some. He was then supplied with a pennyworth, which, on being analysed was found to contain 22 per cent. of added water. Defendant pleaded that she was "as innocent as an angel in heaven." She was a widow, and in receipt of parish pay. A fine of 27s. 6d., including costs, was imposed.

At Wallasey Petty Sessions, on July 12th, John Lucy, dairyman, Parry-street, Seacombe, summoned for having sold milk to which 10 per cent. of water had been added, was fined 10s. and costs. The defendant said he simply sold the milk as he received it from Birkenhead.

At West London Police-court, William Allen, of Conningham-road, was summoned for selling milk which had one-fourth of the fat abstracted. The defendant said it was not his fault. He gave a high price for the milk, and he sold it as he received it. Former convictions were proved, and a fine of £10 was imposed.

At the Barnsley Court House, on July 12th, Joseph Silverwood, milk seller, Roystone, was charged with having sold new milk from which a portion of the cream had been abstracted. Mr. C. J. Tyas prosecuted on behalf of the Barnsley Rural Sanitary Authority. Mr. John Hall deposed to purchasing the milk, a portion of which he sent to Mr. Allen, Public Analyst, Sheffield, who certified that one-third of the cream or butter fat had been taken away. Defendant called his son, who declared the milk was sold as it came from the cow. A fine of 10s. and costs was imposed.

At Cannock, on July 10th, a milk seller, named Stephen Tuft, was summoned at the instance of John Edward Morris, Inspector under the Food and Drugs Act, for having, on May 29th, sold milk in the Cannock-road, Hednesford, with 48 per cent. of the cream taken away. Mr. Willcock appeared for the prosecution, and Mr. Moxon was for the defence.—The Bench thought the case an important one, and fined defendant £5, including costs.

At Warminster, on July 8th, before Lord Weymouth and other Magistrates, charges were preferred against four purveyors of milk for selling milk to William George Selby, Inspector under the Foods and Drugs Act, on the 4th June, which had not the usual amount of fats or solids in it. Mr. Chivers, prosecuted, and Mr. Jones, of Trowbridge, defended. The defence in each case was that the milk sold to the Inspector and supplied to the customers, was exactly the same as it came from the cow. It was not alleged by the prosecution that anything had been added to the milk, and defendants denied that any cream had been abstracted. The Bench held that a technical offence had been committed, and they had therefore decided to inflict a nominal fine of 1s. in each case. Mr. Jones, on behalf of Cross, Payne, and Longley, applied for a Government analysis of the milk that was left, and it was granted.

At the Rochdale Borough Police-court, on July 5th, William Wildman, farmer, of Milnrow, was summoned for selling adulterated milk. Mr. Leach, Deputy Town Clerk, prosecuted, and Mr. Schofield, Sanitary Inspector, said that he bought from defendant's son, in Lower-place, on June 16th, a pint for 1½d. The Analyst's certificate stated that the sample had been deprived of 20 per cent. of its cream. Defendant said that the pasture was poor, the weather had been very dry, and the grass was therefore, not juicy. He had been 20 years on the farm, and had never had a complaint before. He was fined 5s. and costs, or seven days.

At the Stockport Borough Court, on July 5th, William Lomas was summoned for selling milk on June 2nd, which was not of the quality demanded, having 14 per cent. of fat abstracted.—Mr. Dobson said that the Inspector visited the shop on the day in question and asked for a pint of milk, for which he paid three halfpence. He divided the milk into three equal parts, and sent one-third to the Public Analyst, who found that 14 per cent. of fat had been abstracted.—Defendant said he sold the milk as he bought it.—The chairman remarked that he had no doubt the case appeared a hardship to the defendant, but if he would take a guarantee from the farmer to protect himself he would be all right. They must consider the public.—A fine of 10s. and costs was imposed.

GIN.

At Sunderland Petty Sessions before Col. Robson and Mr. Arthur Laing, Dixon Donkin, Lord Seaham Hotel, Silksworth Colliery, was summoned for adulterating gin.—Mr. B. Scott Elder (Chief County Inspector) prosecuted, and said that on June 8th a pint of gin was purchased for 2s. from the defendant's house, and was sent to the analyst, who certified that there was 6·30 per cent. of added water, in addition to the 35 per cent. allowed by the Act.—Mr. E. Bell, for the defendant, whose wife was present in court, said Donkin had been confined to bed for some time past suffering from acute bronchitis. His wife looked after the business in his absence. She had been married to the defendant for only a month, and the adulteration was the result of a pure mistake on her part, the same quantity of water having been accidentally added to the gin as to the rum. Col. Robson said that whether the defendant was ill or not adulteration had taken place, and he must take the consequences. A fine of 20s and costs was then imposed.

At the Malmesbury Petty Sessions, on the 4th July, Richard Hobbs, of the George Inn, Malmesbury, was summoned by James Ward, Inspector of Weights and Measures, for selling gin not of the quality demanded. Mr. Bevir, solicitor, appeared on behalf of Mr. Ward, who proved the purchase of half a pint of gin, paying 10d. for it. The Analyst's certificate showed that 16½ per cent. of water in addition to the maximum allowed by the Act had been added, thus making the gin 51½ degrees underproof. The defendant stated that the addition of water was an oversight, and in breaking down the gin he had done so by guess, and had not tested it afterwards. He was very sorry for what had occurred, and said it should not happen again. Fined £1, including costs and Analyst's fee 10s. 6d. This fine is a premium on adulteration.

BRANDY.

At West London Police court, W. H. Turner, of the Allison Arms, Uxbridge-road, was summoned by Mr. Chambers Leete, Clerk to the Kensington Vestry, for selling brandy to Arthur Ellenden, the Inspector, adulterated to the extent of 35·68 under proof, the limit being 25. Mr. Hanson, who defended, asked that a nominal penalty might be imposed. Mr. Hannay imposed a penalty of £10, with 12s. 6d. costs.

Richard Scales, the holder of an off-license at Ladbroke-grove-road, Notting-hill, was fined £5, with 12s. 6d. costs, in respect to brandy adulterated to the extent of 28·85 under proof.

WHISKY.

At Oldham Police-court, John Neild, landlord of the Coach and Horses, Waterhead, was summoned for a breach of the Food and Drugs Act.—Mr. Cooke (the Deputy Town Clerk), who prosecuted on behalf of Dr. Niven (the Medical Officer of Health), said that on the 5th of last month Sanitary Inspector Thomas obtained a sample of whisky at defendant's house, and when the spirit was analysed, it was found to have been adulterated by excess of water.—Mr. Sixsmith, for defendant, admitted that the whisky was adulterated. Mr. Neild, he said, was also a quarry owner, and he was away at his quarry when the sample was obtained. When he returned he found that the whisky contained an excess of water, and that being so he pleaded guilty. He (defendant) said that in future his customers would get their pound of flesh and their drop of whisky as the law provided.—Mr. Cooke: I did not know that my friend's client was a butcher. (Laughter.)—A fine of 20s. and costs was inflicted.

At Chorley, on July 4th, George Hart, landlord of the Black Bull, Standish, was summoned for having sold weak whisky. P.S. Jackson proved the purchase of a sample containing 5 per cent. excess of water. Defendant was ordered to pay the costs.—Edward Vose, of the Boar's Head Inn, Standish, was summoned for a similar offence. Superintendent Norris said the whisky contained 9 per cent. excess of water. The Bench fined the defendant 20s. and costs.

At Nottingham, on July 14th, Edward Alford, Narrow-marsh, was summoned for selling adulterated whisky. Mr. F. B. Harris (from the Town Clerk's office) prosecuted, and Mr. Arthur Dickens (of Messrs. Hunt and Williams) represented defendant. Mr. Richard E. Byrns, Sanitary Inspector for Nottingham, deposed to purchasing a pint of Irish whisky from defendant on June 10th. On analysis it was found to contain 37 per cent. of water—12 per cent. above the maximum allowed. The defendant contended that the adulteration arose through a mistake, but the magistrates fined him £2.

At North Holland Petty Sessions, Herbert Palmer Winter, Freiston Shore, innkeeper, was charged under the Food and Drugs Act with selling whisky to Superintendent Crawford 29 degrees under proof; 25 degrees under proof being the alcoholic strength allowed by law. Superintendent Crawford gave formal evidence of the purchase of a pint of Scotch whisky, at the Marine Hotel, Freiston Shore, a portion of which was submitted to the Analyst, who certified as above. He took two other samples, which were quite correct. The defendant said he was quite innocent of any intention to infringe the law. Scotch whisky was the spirit least sold at his hotel; and the bottle supplied to the Superintendent was prepared for sale by him (defendant) last December; and he supposed it had lost its strength through being kept so long. If Irish whisky instead of Scotch had been supplied it would have been all right. The Bench allowed the case to be withdrawn on payment of costs.

VINEGAR.

At Glasgow, on the 12th inst., Kennedy Campbell, grocer, 425, Victoria-road, Crosshill, was charged with having, on the 26th May, sold a bottle of malt vinegar which, on analysis, was certified to be diluted acetic acid. Accused denied the charge. The case was a test one. Mr. John Murray, Food Inspector, deposed to the purchase of a bottle of "distilled pure malt vinegar," for which 5d. was paid to the respondent. Dr. John Clark, one of the Public Analysts for Glasgow, stated that he had analysed the sample referred to, and in his opinion it was not genuine malt vinegar, but simply diluted acetic acid. In genuine malt vinegar they found phosphoric acid, organic matters extracted from malt, and not fermented in the process of alcoholic fermentation. Malt vinegar was made by fermentation from an infusion either from malt alone, or along with unmalted grain. Distillation left behind the matters extracted from the malt, but a slight flavouring ingredient remained along with the acetic acid. Acetic acid was also produced by the distillation of wood, and there was nothing except the aroma to distinguish that acetic acid from acetic acid distilled from malt. He understood the former vinegar could be produced for 1½d. per gallon, whereas malt vinegar cost 6d. per gallon. Brown was the general colour of malt vinegar before distillation. The only benefit he could see in distillation was to enable makers to utilise sour beer and waste malt liquors, and to enable them to mix wood acetic acid with distilled malt vinegar. Messrs. Crosse and Blackwell were the manufacturers of the vinegar complained of. Malt vinegar was more wholesome than acetic acid, which might possibly interfere with the action of the gastric juices. Mr. Tatlock, another City Analyst, corroborated. Mr. Campbell Paterson, wholesale vinegar merchant, Glasgow, stated that there was a great gain in selling acetic acid made from wood. In Scotland white vinegar was preferred to brown, but in England and Ireland it was the reverse. Mr. Sidney Beemish, secretary to Messrs. Crosse and Blackwell, for the defence, said that the firm manufactured about 1,000,000 gallons of vinegar in a year. They made their vinegar from malt and grain, and from these ingredients only. There was a white label for their brown vinegar, and a green label for the distilled. They had never had a complaint against their firm before. In Scotland thirty bottles of white vinegar were sold to every one of brown vinegar. Mr. Charles Gerrish, manager to Messrs. Crosse and Blackwell, corroborated the above witness. Sheriff Birnie said the prosecution had been valuable as showing the public what they probably did not know before. He dismissed the case, remarking that the excellent character of Messrs. Crosse and Blackwell's goods had been thoroughly vindicated by the proceedings.

At Bootle Police Court, on July 14th, Elizabeth Wilson, grocer, 4, Canal-street, was summoned for having sold vinegar which was not of the nature and quality demanded by the customer. On the 20th ult., Inspector Ferguson purchased a pint of vinegar, which was found, on being analysed, to contain 80 per cent. of distilled acetic acid and water. The maker of the vinegar stated that in Johnson's dictionary it appeared that acetic acid was the principal constituent of vinegar. The Chief Constable (Mr. Cumming) referred to a recent case in Birmingham, in which an appeal against a conviction for a similar charge had been dismissed. The Bench, as this was the first case they had had in Bootle, decided to dismiss the summons, but warned the defendant that any future case would be severely dealt with. John Carter, a chip potato dealer, was fined 10s. and costs for a similar offence, the fine being imposed as the defendant did not appear.

MUSTARD.

At Northleach Petty Sessions, Thomas Hayward was summoned for selling adulterated mustard.—P.-C. Mitchell proved the purchase of a parcel of the article from defendant's daughter. The necessary regulations were complied with, and the Public Analyst reported that the sample contained 13 per cent. of wheat starch. Witness was served from a half-pound canister, but his attention was not called to the inscription on the tin, neither was the packet purchased by him labelled to show that it contained adulterated mustard.—Defendant stated that the inscription on the tin from which witness was served shewed that the mustard contained other ingredients.—The Bench said the offence was probably committed under a misapprehension, and defendant must be careful in future. He was ordered to pay the costs, which were heavy, £1 1s. 3d.

GERMAN YEAST.

At Gainsburgh Petty Sessions, on July 4th, J. Hilton, Kirton, was charged with selling to Sergt. Pacey, two pennyworth of German yeast, containing 50 per cent. of starch, mostly from potatoes.—Sergt. Pacey said he was supplied with 1½ ounces, and told him he wanted it for analysis. Defendant said it was well known that it was a mixture. Witness told him he had not informed him of that. Defendant said he knew he had done wrong, and the Magistrates knew as well as he did that it was a mixture. Witness then divided it into three parts in the usual manner.—Supt. Osborn said on June 5th, he received from last witness two packets of German yeast, one he labelled G.69, and handed to Dr. Muter, Public Analyst for the parts of Lindsey, and his certificate stated that the yeast contained 50 per cent. of starch, chiefly potato. Defendant said he had sold the yeast for twelve or fourteen years at the rate of 56 lbs. of yeast a week, and he never had one complaint. He received it as yeast and sold it as such. Supt. Osborn said defendant was the only man he knew in the division who did not label his yeast. Defendant said he had previously been summoned for selling chicky and coffee which was labelled, and therefore thought the label was of no use. Supt. Osborn said so far as he knew throughout the country, "German yeast and starch" was the label used. Fined 10s and the costs.

BUTTER.

At Greenwich Police-court, on July 4th, William Hillier, 13, Hornshay-street, Deptford, was summoned by the Greenwich District Board of Works for selling as butter ½ lb. of an article admixed with 85 per cent. of foreign fat. Mr. Spencer prosecuted. The butter was bought by a boy, acting on behalf of the Board's Inspector. Defendant denied that the article was sold as pure butter. Fined £3 and 2s. costs.—Jane Dunnage Tye, 9, Hornshay-street, Deptford, was summoned for a similar offence, the percentage of adulteration being the same. She pleaded that it was a mistake by her daughter who was unused to serve. Fined £3 and 2s. costs.—Jacob Ray, 69, Kender-street, Deptford, was similarly summoned, the adulteration being again 85 per cent. Defendant's wife went into the box and swore that the article had been bought from a provision dealer for pure butter, but Mr. Kennedy imposed a fine of £1 and 2s. costs.

At West London Police-court, John Binks, of Askew-road, Shepherd's-bush, was summoned by Mr. Cockburn, Clerk to the Hammersmith Vestry, for exposing for sale margarine, the same not being properly labelled. There were two summonses, and Mr. Hannay imposed a penalty of £5, with 12s. costs in each case, observing that it all arose through unjust dealing for the love of gain.

LARD.

At Ebbw Vale Police-court, on July 5th, before Messrs. James Phillips and Llewellyn, John Pritchard, grocer, Market-street, was summoned under the Food and Drugs Act for selling impure lard on June 7th. Mr. Gustard prosecuted on behalf of the County Council, and Mr. Daniel Evans defended. Sergeant-Inspector Edwards deposed that he sent a young lady to the defendant's shop to purchase half-a-pound of lard. He took it back to the shop, and told the assistant that it would be sent to the Public Analyst. This was eventually done, with the result that he certified that the lard contained 30 per cent. of cotton seed oil, and was consequently impure. James Evans, for the defence, proved that the young lady asked for the cheapest lard, and when people asked for cheap lard it was the custom to supply lardine. The best lard was sold at 8d. The Bench said they would not convict in that case, but warned the defendant to inform his customers in the future that he was supplying lardine. Defendant had to pay the costs of the case.—David Davies, Victoria-road, was summoned for a like offence, and was dealt with in the same manner.

At Sunderland Petty Sessions, Mary Jane Kirtley was summoned for alleged adulteration of lard at South Hylton on June 8th last. Mr. Crow defended, and by agreement the case was adjourned for a fortnight.

WEIGHTS AND MEASURES PROSECUTIONS.

At Swindon, on July 13th, Frank Wall, proprietor of the Clifton dairy, Swindon, was summoned for having in his possession a false and unstamped gill measure. Mr. Ward, Inspector for North Wilts, said defendant's man was selling milk by means of the measure, which was 4½ fluid drams above a gill. He had previously rejected it as incorrect. Defendant said he had stamped measures but this was taken out by mistake. He did not profess, moreover, to sell milk by gills, it was retailed in half pennyworths. The Bench regarded the offence as a technical one, and inflicted the small fine 2s. and 14s. costs. The measure was ordered to be forfeited.

Arthur Leonard Tomlyn, of the East Leaze Dairy, Swindon, was summoned for a similar offence in respect to a gill measure, which was one-fortieth short. Mr. Ward said the measure had been rejected when submitted by defendant's predecessor.—Defendant said he bought some measures with the round; he threw away several which were unstamped, but must have missed this one.—Fined 10s. and £1 4s. 6d. costs.

Thomas Humphriss, dairyman, of Okus-field, Swindon, was summoned for having in his possession for use in trade a measure not of a denomination allowed by the Board of Trade.—Mr. Bevir intimated that this was the first summons taken locally under Section 24 of the Act. The section stipulated that every person who used or had in his possession for use in trade a weight or measure, which was not of the denomination of some Board of Trade standard was liable to a fine not exceeding £5, and the weight or measure was liable to be forfeited. Milk-sellers were in the habit of using what was known as a half-penny measure for selling a half-pennyworth of milk. This was a distinct offence, for the reason that a half-penny measure was not of any known denomination. When a person bought a half-pennyworth of milk he got an unknown quantity. The milk-seller might cheat to any extent; a half-pennyworth might be a half-pint, a third of a pint, or a quarter-pint, and one man might sell twice as much as another for the money. The Board of Trade stipulated that milk must be sold by some recognised measure.—Mr. Ward stated that the measure was less than a third of a pint, and if a person paid a halfpenny for its contents they would be paying at the rate of more than 1½d. for a pint.—Asked by the Clerk how a half-pennyworth could be sold, the Inspector said the vendor must guess at the quantity, or there would be no objection to his selling a little more than the contents of a gill for a half-penny.—Defendant denied that he sold from the measure he kept it to fill up pints or half-pints. He was innocent, but he was sorry a mistake had occurred. The magistrates said defendant was clearly in the wrong, but as this was the first case of the kind, they would not fine him. He would have to pay 19s. 6d. costs.

Alfred Goddard, of Avenue-road, Castle-hill, was summoned on July 12th for having in his possession a weighing machine which was unjust, and an ounce weight unstamped. Inspector Tyler said that the weight could not be stamped, as it was not denominated. The scales were unjust to the extent of half an ounce against the purchaser. The defendant was fined 15s.

THE BRITISH INSTITUTE OF PUBLIC HEALTH.

The Edinburgh Congress opens on Thursday, July 27th; President, Henry D. Littlejohn, Esq., M.D., F.R.C.S. The following is an epitome of the programme of proceedings:—

THURSDAY, 27TH JULY, 1893.

10 a.m.—Meeting of the Council. 11 a.m.—Induction of the President. Presidential Address. 11.45 a.m.—The Congress will be arranged in three sections:—(a) Preventive Medicine.—Chairman: J. B. Russell, Esq., M.D., LL.D., Medical Officer of Health, Glasgow. (b) Sanitary Engineering.—Chairman: G. F. Armstrong, Esq., M.A., M. Inst. C.E., Professor of Engineering, University of Edinburgh. (c) Chemistry and Climatology.—Chairman: A. Crum-Brown, Esq., M.D., LL.D., Professor of Chemistry, University of Edinburgh. (Note.—The list of papers to be read in each section will be announced shortly). 1.30 p.m.—The sections will adjourn for luncheon. 3 p.m.—The members will have the option of being conducted to—(a) The Castle and Heriot's Hospital; (b) St. Giles' Cathedral, the Law Courts and the Council Chambers; or, (c) The Sewage Farm of Craigentinny, the Leith Docks, Newhaven, Botanic Gardens, the Arboretum, and Fettes College. 8.30 p.m.—Reception of the Members of the Congress and Ladies by the Magistrates and Town Council in the Museum of Science and Art.

FRIDAY, 28TH JULY, 1893.

10 a.m.—Meeting of sections. 12 noon—Meeting of Volunteer Medical Officers, Brigade-Surgeon Sir Douglas MacLagan, V.D., presiding. 2 p.m.—The sections will adjourn for luncheon. 3 p.m.—The Members will be conveyed in carriages to Craigmillar Castle, and thereafter to the Corporation Water Works at Alnwick Hill, Liberton. The drive home will be by the Braids and Morningside. 7.30 p.m.—Dinner of the Institute in the Grand Hall, Waterloo Rooms. Tickets, 10s. 6d., without wine.

SATURDAY, 29TH JULY, 1893.

10.30 a.m.—Meeting of Council. 11 a.m.—General meeting of the Institute in the Lecture Hall of the Museum of Science and Art. 12 noon.—Sectional meetings. 1 p.m.—Visit to the Forth Bridge by road, rail or sea at the option of the Members. 7.30 p.m.—Dinner by the Right Honble. the Lord Provost in the City Chambers. (By special invitation). 9 p.m.—Reception of the Members of the Congress and Ladies by the Royal College of Surgeons in the Art Galleries, Mound. (Carriages at 11).

SUNDAY, 30TH JULY, 1893.

11.30 a.m.—The Very Rev. J. Cameron Lees, D.D., Dean of the Thistle, will preach in St. Giles' Cathedral. The Right Hon. the Lord Mayor of Dublin will attend this service in state. The President and Members of the Congress will also attend. Members of the Council of the British Institute of Public Health are requested to wear their academical gowns and hoods.

The Right Hon. the Lord Mayor of London will attend in state the service in the Pro-Cathedral of St. Mary, Broughton-street.

MONDAY, 31ST JULY, 1893.

10 a.m.—Meeting of sections. 1.30 p.m.—Adjournment for luncheon. — p.m.—Concluding general meeting of the Congress. 4 p.m.—Visit to Holyrood Palace. Thereafter the various objects of interest in the Cannongate will be pointed out. 7.30 p.m.—Dinner by the Royal College of Physicians to Members of the Congress (by special invitation).

The meetings of the various sections will be held in the University, where the Officials of the Institute will be in attendance on

WEDNESDAY, 26TH JULY, 1893,

for the enrolment of Members, and giving information as to hotels, lodgings, etc., etc.; and thereafter, daily, from 9.30 a.m. to 3.30 p.m., during the sitting of the Congress.

Congress tickets, price 10s. 6d. (Members of the Institute and ladies free), will admit to all the sectional meetings, and afford the privilege of joining the various excursions, which will be conducted by distinguished citizens. Tickets for the excursions may be had in the Reception Hall.

Letters, desiring information as to any department of the Congress, will receive immediate attention, if addressed: The Local Secretary, Sanitary Congress, Health Office, Edinburgh.

ANSWERS TO CORRESPONDENTS.

INSPECTOR ENNIS.—Thanks for fuller report of case. We think Inspectors would understand the full effect of the decision from the short report published last week. We are sorry the fuller report did not reach us in time for use instead of the condensed one.

MR. SELBY.—Reports received, and we are obliged for your courtesy. We had already got abbreviated reports in type or would have used those sent.

COLONIAL.—Have nothing to do with it. The Imperial Institute is a useless humbug, originated by a "set" for the purposes of providing themselves with comfortable positions and salaries.

ANTI-ADULTERATION.—The statements are untrue. The London Reform Union has done nothing to check adulteration, and its professions are nonsense. Its real objects appear to be to provide an idler or two with a *raison d'être* for sponging upon the public, and a few *poseurs* with opportunities for self-advertisement.

CORRESPONDENCE.

THE CAUSE OF MR. MAYBRICK'S DEATH.

To the EDITOR of FOOD AND SANITATION.

Sir,—You threw out a suggestion some time ago that the cause of Mr. Maybrick's death was want of sufficient nutrition, which you ascribed to the use of articles of diet whose properties had not been sufficiently tested by the doctors who prescribed them. I agree with you as to the cause of death being want of nutriment and stimulants, but I think it arose from a different cause, and one which, if a similar case should again arise, the attendant physicians should be careful to avoid.

Mr. Maybrick admittedly died of exhaustion. Dr. Paul thought the attack of gastro-enteritis was not a very severe one. His strength was maintained pretty fairly as long as his wife attended on him, but as soon as the nurses were set to watch her and prevent her administering anything he became weaker and speedily died.

On the first day that Nurse Gore was called in, Mrs. Maybrick said it was time for her husband to have his medicine and mixed it in a glass. The nurse said he should have his food first and instead of asking for a new glass threw away the medicine. It does not appear whether Mr. Maybrick ever got it.

On the same evening Mr. Maybrick was to have got Neave's Food, which the doctors had ordered. Nurse Gore thought Mrs. Maybrick had tampered with it and put it by for analysis. The bottle was full, or nearly full, so that Mr. Maybrick could have got little or none of it. It does not appear that anything was substituted for it. Mr. Maybrick was apparently left without his food. The bottle in question proved to be pure.

Next night, instead of Neave's Food, Mr. Maybrick got two teaspoonfuls of Valentine's meat juice diluted in water. What nutriment this contained your readers are already aware, even if it had been undiluted. But after two teaspoonfuls, this meat juice was also discontinued, because Mrs. Maybrick was suspected of tampering with it. Arsenic was afterwards found in it but whether introduced by Mrs. Maybrick or not may be doubted.

On the same night Mrs. Maybrick was suspected of tampering with a bottle of brandy which was accordingly laid aside for analysis also. It proved to be pure. But on this Thursday night it would seem that Mr. Maybrick got neither his proper food nor his proper stimulant. Is it surprising that he was weaker and worse on Friday morning, and, in fact, never rallied?

However, one more incident occurred on Friday afternoon. Mr. Michael Maybrick found his sister-in-law changing medicine from one bottle to another. He scolded her, put by the bottle for analysis,

and directed the prescription to be remade. The medicine proved to be pure, but how long after the proper time was the re-made prescription administered to the patient?

Cases like this rarely occur in practice, but when they do, I apprehend that it is the clear duty of the physicians not merely to see that poison is not administered to the patient, but to see that the proper food, medicine and stimulants are administered. Had this been done Mr. James Maybrick might still be alive. But the doctors thought more of trying to catch Mrs. Maybrick in the act of attempting to poison her husband, than of seeing that he got what he required. They did not breathe a word of their suspicions to her. They only set the nurses to watch her, to lay hold of everything that passed through her hands and preserve it for analysis without saying a word (it would seem) about replacing what had thus been laid hold of in order to maintain their patient's strength. This was, I think, a more serious error, which has probably resulted in killing one person and dooming another to penal servitude for life.—Yours truly,

OBSERVER.

SPURIOUS VINEGARS.

To the EDITOR OF FOOD AND SANITATION.

SIR,—Your full and comprehensive report of the Birmingham Vinegar Case will, it is to be hoped, enlighten the British public upon the many nauseous compounds sold as vinegar, most of which decoctions cost but a few pence per gallon, and retail at about 200 per cent. over prime cost.

No doubt the Birmingham Recorder's decision will discomfort a host of manufacturers of acetic compounds, and more ought to be heard about the extraordinary evidence given at Birmingham by gentlemen who claim to have a knowledge of chemistry, that anything sour was vinegar. If this idea holds good, we shall soon hear that sulphuric acid is vinegar.

Spurious vinegar is doubtless sold to an enormous extent, not in the provinces only, but in many large grocery establishments, where the public believe pure articles are sure to be obtained. Food Inspectors in London have a wide field before them in this respect. Vinegars are styled this quality or that, malt, and even wine by continental names, which are nothing but decoctions of acetic acid coloured. Some heavy, dark vinegars cover much that is repulsive to the naked eye. The vinegar eel, existing in many vinegars, would sicken the strongest stomach. Should any of your readers desire to see a specimen of this vinegar with the lively inhabitants, I shall be glad to send you a sample, which was recently purchased at a large establishment in London.

Vinegar is defined in the *Globe Encyclopædia* thus:—The quality depends principally on the source whence it is obtained, the best being wine, after which comes that prepared from pure malt.

Your wholesome advice to grocers should save them a host of trouble, particularly if they insisted the article they vended could be guaranteed pure.—Yours truly,

PURO VINO ACETI.

AGRICULTURAL IMPORTS.

Account shewing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended July 15th, 1893, together with the quantities imported in the corresponding week of the previous year:—

		Quantities.	
		1892.	1893.
Animals living:			
Oxen, bulls, cows, and calves	Number	12,185	7,216
Sheep and lambs	"	1,211	298
Swine	"	395	—
Fresh meat:—			
Beef	Cwts.	48,429	27,893
Mutton	"	14,702	35,253
Pork	"	632	1,112
Salted or preserved meat:—			
Bacon	"	80,554	58,859
Beef	"	5,529	4,061
Hams	"	34,660	18,536
Pork	"	4,945	3,649
Meat unenumerated, salted and fresh	"	2,597	8,000
Meat preserved, otherwise than by salting	"	13,092	7,615
Dairy produce and substitutes:—			
Butter	"	41,749	47,757
Margarine	"	19,064	24,661
Cheese	"	75,471	55,385
Condensed milk	"	10,252	10,807
Eggs	"	231,829	207,312
Poultry and Game	Gt. Hndr.	2,320	2,296
Rabbits, dead (not tinned)	Value £	10	313
Lard	Cwts.	26,328	28,858
Corn, Grain, Meal and Flour:—			
Wheat	"	1,985,899	2,162,367
Wheat Meal and Flour	"	434,355	396,003
Barley	"	65,059	498,541
Oats	"	986,071	862,434
Pease	"	59,961	44,086
Beans	"	156,207	7,360
Maize or Indian Corn	"	992,352	915,608
Fruit, Raw:—			
Apples	Bush.	29,406	18,056
Oranges	"	33,315	9,100
Lemons	"	15,133	28,769
Cherries	"	6,510	9,244
Plums	"	8,288	39,594
Pears	"	1,465	64,024
Grapes	"	45,875	1,688
Unenumerated	"	3,082	58,423
Hay	Tons, †	—	4,694
Hops	Cwts.	—	3,813
Vegetables:—			
Onions, raw	Bush.	77,264	77,943
Potatoes	Cwts.	224,058	77,283
Unenumerated	Value £	34,185	33,264

* Not separated in 1892. † Not rendered in previous year.
Statistical Office, Custom House, } T. J. PITTAR.
London, July 17th, 1893.

Chafed Skin, Piles, Scalds, Chilblains,
Chapped Hands, Neuralgic and Rheumatic Pains,
Sore Eyes, Ear-ache, Cuts, Sunburn, Insect Bites
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Food and Sanitation.

SATURDAY, JULY 29, 1893.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

FRANCE AND ENGLAND—A CONTRAST.

LARD ADULTERATION AND
WARRANTIES.

EXTRAORDINARY MAGISTERIAL
DECISION.

"At Houghton-le-Spring Petty Sessions, on July 20th, an important decision was given in a case of alleged sale of adulterated lard, preferred by Mr. B. Scott Elder, Chief Inspector under the Food and Drugs Act to the Durham County Council, against Mr. Richard Smithson, grocer, of Easington-lane. Mr. A. T. Crow, jun., of Sunderland, defended, and at the first hearing of the case submitted that, as the bladder of lard had printed or stamped on it 'Warranted Pure — "Star" brand,' his client was exonerated. Mr. Elder contended that, according to the Act of Parliament under which the prosecution was taken, the warranty must be in writing, and have the signature of the

A BUTTER BLENDING MERCHANT
FINED £120, AND IMPRISONED
FOR EIGHT MONTHS.

"At Lisieux, on June 26th, Monsieur Pissot, butter merchant, was charged with butter adulteration. Pissot did a large business with English buyers, and had previously been imprisoned for four months for adulterating butter with margarine. On this occasion he was sentenced to eight months' imprisonment, in addition to which punishment he was fined £120, and compelled to insert the judgment as an advertisement in forty-five newspapers throughout five departments in Normandy."

wholesale firm supplying the lard appended. In defendant's warranty there was no signature. The case was adjourned for consideration of the arguments, and at the Court as above, the Bench announced that they had decided to uphold Mr. Crow's contention, and dismissed the case against Smithson. Mr. Elder asked the Bench to state a case, and the Chairman (Mr. E. Richardson), with whom was Mr. H. R. J. Webster, who heard the opening of the charge, promised to do so. Mr. Elder said that the decision would now go to a higher court."

How much longer, we wonder, will the "warranty" game be tolerated? In a report for July, Mr. Scott Elder says:—"It would appear that until my last report, the provisions of the 'warranty' clause were not generally known throughout the district, but judging from the number of written warranties produced during last quarter, it is more than likely that they will henceforth be an important factor in prosecutions." The "warranty" dodge is one of the simplest, safest and most encouraged forms by which justice is defeated, and the public defrauded.

France tolerates no such trickery, but heavily fines and punishes by severe imprisonment those who plunder the public and ruin native industries. In England we do not imprison, but we make Members of Parliament of this class of traders, and give them opportunities for blocking and opposing necessary, far-seeing legislation, like The Hon. Horace Plunket's Margarine Amendment Act. We shall, in an early number, give some facts as to the food swindles of some of these wretched politicians.

ANNOTATIONS.

LONDON BAKERIES AND BLACKBEETLES.

Edwin P. Joyce, baker, of 58, George-street, Portman-square, was summoned at Marylebone Police-court, by the Marylebone Vestry. On the 4th May the Marylebone Sanitary Inspectors visited the defendant's bakehouse at four o'clock in the morning. The whole place was very dirty. The vaults where the flour was stored were damp, and dirty water had accumulated. The Inspectors thought it had not been cleansed since it was put up. In addition to smelling offensively, and being black with dirt, the bakehouse was swarmed with blackbeetles and cockroaches, and they saw some of them crawling over the dough in the troughs. Dr. Wynter Blyth, Medical Officer of Health, confirmed the evidence of his officers as to the unwholesome condition of the place. He could distinctly recognise the bad smell of blackbeetles.

It is to us a much more pleasing task to record Dr. Wynter Blyth's efforts to keep blackbeetles out of bread, than the putting of alum into it by the medium of "alumed" baking powder.

LIMERICK AND ADULTERATION.

At the Limerick Summer Assizes a fortnight ago the question of establishing a local chemical laboratory for the purpose of getting analyses done more quickly than at present came under consideration. It was stated that the laboratory would cost up to £500. The grand jury expressed approval, provided that the chemist in charge should be fully qualified for the position.

We understand that it was also decided to advertise for an Analyst, but we are unable to give any information as to the salary or to whom application is to be made, the persons responsible not having had the courtesy to send any particulars.

THE FOOD AND DRUGS ACTS IN SOUTHAMPTON.

In his report for June, Mr. A. Wellesley Harris, M.R.C.S., L.S.A., D.P.H., Medical Officer of Health, states that there were taken at his instructions during June, 21 samples of coffee, of which 2 were adulterated with 34 per cent. chicory (fined 40s. and £3 3s. costs), and 54 per cent. chicory (fined 40s. and 11s. 6d. costs). Six samples of milk were taken for analysis of which only one was of average quality. Two of the six showed adulteration with two per cent. added water, one 6 per cent. added water, and one 23 per cent. added water. In two of the cases summonses were issued.

ABERDEEN AND THE ANALYSES OF AERATED WATERS.—A special meeting of the Public Health Committee of the Town Council was held to receive a deputation from the aerated water manufacturers who had complained to the committee of the City Analyst's analyses. Mr. Sellar made a statement to the meeting, holding that results different from those given by Mr. Jamieson had been arrived at by other analysts. Mr. Jamieson was not present at the meeting. The resolution arrived at by the committee was that Mr. Sellar should furnish a written statement of the facts he had put before the meeting.

MARKING FOREIGN CHEESE.

The Bill which is to regulate the Sale of Foreign and Colonial cheese, brought before the House of Commons by Sir A. Acland Hood, and is "backed" by Captain Bagot, Mr. G. Stanley, Mr. Strachey, Mr. Disraeli, and Colonel Chester Master, is as follows:—

Whereas it is desirable to make regulations for protecting the public against the sale of Foreign or Colonial cheese as British or Irish cheese: Be it therefore enacted by the Queen's most Excellent Majesty, by and with the advice and consent of the Lords Spiritual and Temporal, and Commons, in this present Parliament assembled, and by the authority of the same, as follows:

1. *Commencement of Act.*—This Act shall come into operation on the first day of January, one thousand eight hundred and ninety-four.

2. *Label to be attached to Foreign or Colonial cheese.*—Every person dealing in cheese shall, on exposing or offering for sale, or selling Foreign or Colonial cheese, have attached thereto, in such a manner as to be clearly visible to the purchaser, a label marked in capital letters not less than one inch square the words "Foreign" or "Colonial," as the case may be.

3. *Offences.*—Every person who shall deal in, sell, or expose for sale, any Foreign or Colonial cheese as British or Irish cheese shall be guilty of an offence under this Act.

4. *Definition.*—For the purposes of the Act the words British and Irish cheese shall mean all cheese made in the United Kingdom of Great Britain and Ireland, the Channel Islands, and the Isle of Man, and the words foreign or colonial cheese, shall mean all cheese imported from outside those limits.

5. *Penalties under the Act.*—Every person dealing in cheese, whether wholesale or retail, who is found guilty of an offence under this Act, shall be liable, on summary conviction, to a fine not exceeding five pounds for the first offence, and for the second or any subsequent offence to a fine not exceeding twenty pounds.

6. *Procedure.*—Proceedings under this Act shall be the same as prescribed by sections twelve to twenty-eight of the Sale of Food and Drugs Act, 1875, and all officers employed under that Act are empowered and required to carry out the provisions of this Act.

7. *Presumption of origin.*—For the purposes of this Act any cheese exposed for sale and not marked "Foreign" or "Colonial" shall be presumed to be exposed for sale as British or Irish cheese.

8. *Burden of proof to be on defendant.*—In any prosecution under this Act the Court shall require that the defendant show that the cheese alleged to be foreign or colonial cheese is not foreign or colonial cheese, and the burden of proof shall rest on and be proved by the defendant.

9. *Short title.*—This Act may be cited as the Foreign and Colonial Cheese Sale Act, 1893.

THE GRAND JURY OF DROGHEDA AND THE FOOD AND DRUGS ACTS.

At their last meeting, the Secretary said Sergeant Bennett, who was present, wished to be appointed by them as an Inspector under the Food and Drugs' Act, no salary to be attached to the appointment, which was a most unusual thing. (Laughter.) Sergeant Bennett said the section of the Act left it optional with the Grand Jury to appoint a policeman as Inspector. Mr. Moore—No pay though? (Laughter.) Sergeant Bennett—Oh, no. Secretary—I think the Corporation are the local authorities. It is very complicated. The Grand Jury have to pay the Analyst. Mr. Mangan—Better look over the Act of Parliament before Tuesday next, and we can give an answer. Sergeant Bennett—I have been directed by my authorities to ask the question. Secretary—But do they say the Grand Jury is the body to appoint? Sergeant Bennett—Yes. The Grand Juries always appoint them. In reply to the Secretary, the Sergeant said there would be some expenses to be incurred in the sending up of samples. Mr. Magee asked was there not already an Inspector in the town under the Act. Several jurors said Mr. Weldon had acted in that capacity. Mr. Harbinson pointed out that in some cases prosecutions had fallen through on account of their not being proper appointments. The Secretary said no prosecutions had fallen through with Mr. Weldon. Mr. Harbinson said certainly not. He referred to Dublin. Mr. Moore—When the Sergeant will do the duties for nothing, I don't see why we should have any objection. Mr. Magee—The expenses would be very trivial. The Secretary (quoting from the Act) said such expenses in the case of a borough were to be paid out of the borough rate. The difficulty then arose, as there was no borough rate in this town, and he had no way to provide the money to pay the expenses, as if he did the auditor would meet him by saying it should only be borne by the borough rate. Mr. Magee—would it not be possible to make a presentment for any expenses? Secretary—No. The difference is just between the county and the borough. Mr. P. McQuillan—And when Mr. Weldon does the duty where is the difference? Secretary—He seems to me to do everything satisfactorily. Mr. Mangan—He is a most energetic officer. Mr. Davis—I don't think it is the duty of the Grand Jury to make the appointment at all. Sergeant Bennett was then informed that the Grand Jury considered the appointment should lie in the hands of the Corporation.

CUPAR-FIFE AND ANALYSES.

At the last meeting of the Fifeshire County Council, at Cupar, the Chief Constable stated that he and Dr. Nasmyth had arranged to co-operate in regard to the carrying out the getting of samples for analysis under the Food and Drugs Act. They had taken, he said, already six samples of whisky—four at Ceres and two at Dunfermline, and others were arranged for. Of the six samples analysed by Mr. Macdougald, four of them had been found to be adulterated, but, he was glad to say, with pure water only. He was pleased nothing worse was found in them. It was arranged that others would be taken at certain fairs and games in the county. It was explained that the samples had 12 per cent. of water. The taking samples of whisky only seems a one-eyed way of going about the work of protecting the public. Is there no spurious vinegar in Cupar, and does no Mustard King send his ten per cent. wheaten flour fraud there; and what is the reason that butter, lard, milk, &c., are left carefully alone?

THE PRICE OF MILK.

A meeting of West-end milk vendors, including representatives of the largest dairy companies, was held last night at the Shepherd's-bush Hotel, the chair being occupied by Mr. Samuel Smith. Hammersmith, Shepherd's-bush, Chiswick, Fulham, Bayswater, and Notting-hill were all represented, the circular being signed by nearly one hundred persons in the trade. The reason for holding the meeting was stated in a letter, read by Mr. Santo (Starch-green Dairy), stating that it would be necessary to increase the price of milk one penny per quart, for the following reasons:—First, "That farmers must be paid a higher price, or else there will be a discontinuance of supply during the ensuing winter." Secondly, "That except, perhaps, for the next few weeks, when there may be a little more pasturage, owing to the rain, it will be difficult to produce milk in sufficient quantities for the supply of London." Thirdly, "That the price of horse-keep is now so high that the cost of delivery by the wholesale and retail dealer is greatly increased." Mr. Easton contended that in asking for the extra penny per quart they were not asking for any favour, as it was simply a matter of necessity in continuing the supply to the public. Mr. Pocock said he had received a number of letters from farmers in the country, stating that they could not continue to supply the market at the present prices. It was true there had been rain, but it must be remembered that there was a short drought last year, and the hayricks got very short, and the supply was now down to its lowest ebb. Delegates from North London, Croydon, and South and South-Eastern London, addressed the meeting. On the motion of Mr. Pocock, seconded by Mr. Smithies, a resolution in favour of a rise of 1d. per quart was adopted.

HEREFORD COUNTY COUNCIL AND ITS ANALYSTS.

The Herefordshire authorities seem to have a belief that a Public Analyst ought to certify samples as adulterated even if they are not so. At their last meeting the Chairman said "that the Local Government Board had put the county in a difficulty in regard to County Analysts. This subject was, by no means, a new one. Some years ago, when the matter was under the control of this Court, a return was regularly received from the Analyst, always consisting of one word, "nil." The Court thought it was useless to have an official appointed to do absolutely nothing, and an arrangement was subsequently made with the Analysts of two neighbouring counties. A short time ago the County Council delegated their duties in this matter to the Standing Joint Committee, who decided that it would be better to have the analyses done at a certain fixed sum, and they agreed with a gentleman named Voelcker, a relative of the eminent Analyst. But, for some reason, the Local Government Board would not permit the present arrangement to be put an end to. There would now be, probably, a considerable difficulty experienced in prosecuting cases of adulteration. One case had been submitted to Dr. Voelcker, who pronounced the sample to be adulterated. In consequence of the great delay in the reply from the Local Government Board, and subsequently in connection with the agreement, it would be impossible to proceed in that particular case. The defendant could insist upon the Analyst being present to swear to his analysis. On behalf of this Court and the Standing Joint Committee, he could say that their hands were clean in this matter. They had been desirous that every useful Act should be put into effect in this county, and were met by the opposition of a Government Department which, while a progressive Government was in power, appeared to be desirous of putting obstacles in its way. In reply to the Rev. E. B. Hawkshaw, the Chairman said that things for analysis should be sent to the two Analysts at Worcester and Cheltenham, who had been acting for the county for some years."

THE ITALIAN ENGLISH MINISTER AND BUTTER SWINDLES.

A deputation waited upon Mr. Mundella at his private room at the House of Commons on July 18th, in support of Mr. Horace Plunkett's Bill to amend the Margarine Act and the Sale of Food and Drugs Act as regards the sale of margarine. The deputation, which consisted of Mr. Plunkett, Mr. Sexton, Mr. John Redmond, and Mr. Maurice Healy, from Ireland, and Sir Richard Paget, Mr. Walter M'Laren, Mr. Rankin, and Mr. Jeffreys, from England, were not very cordially received by the President of the Board of Trade. They asked that the Bill should be allowed to proceed to a second reading in order that it might be referred to a Select Committee. Mr. Mundella would not assent to assist the promoters of the Bill to this extent, on the ground that he did not wish to admit that any principle was involved in the measure, but he expressed the opinion that the Government would favourably consider a motion for the appointment of a Select Committee to inquire into the working of the Margarine Act of 1887, with the usual references. With this small concession the deputation, after some conversational discussion, retired. Yet this Italian enemy of England, Ireland and Scotland draws something over £2,000 per year from England for this kind of ignorant stultification of what ought to be a useful public department.

BEER AND THE POLITICAL PUMBLECHOOK.

In the House of Commons Mr. Quilter asked whether the reference to the Royal Commission on Agriculture would include any inquiry into the substitution of sugar, molasses, rice, maize, and other ingredients for barley malt, and of chemical substitutes for hops; and into the diminution in the number of small brewers, as disclosed by the return issued this year relating to brewers' licences; and to the effect on the cultivation of barley and hops in this country. The Chancellor of the Exchequer in reply did not think this subject could be made the object of special reference, but he had no doubt that it would be included within the general terms of reference. Mr. Quilter then asked whether the right hon. gentleman was aware that Bills had been introduced to lessen the adulteration of beer, and that these Bills had been backed by members of all shades of politics, including the present Minister of Agriculture, and whether he was aware that at meetings of agriculturists some legislation in this direction was one of the most approved remedies. The Chancellor of the Exchequer said I am aware of the zeal and activity of the hon. member in efforts to secure the purity of beer. (Laughter.) Mr. Heneage asked whether the House could be afforded an opportunity of discussing the question. No answer was returned.

And this is the manner in which a serious question affecting important English industries is treated by political platitudinarians. We have often wondered for what under the canopy of heaven, the Right Hon. Sir William Falstaff lineal-descendant-of-the-Plantagenets-Harcourt draws £5,000 per year. We now know, and the Bass and M. B. Foster companies may possess their souls in patience until, well! we suppose, until it comes to pass that our Chancellor of the Exchequer is not an ass.

THE SANITARY CONDITIONS OF BRAZILIAN MEAT EXTRACT DEPOTS.

Santos, in Brazil, is a plague spot. Yellow fever for years having slain thousands of victims, and hundreds are daily poisoned and dying. Foreign residents in that city have complained of the neglect of the authorities to take precautions to guard against outbreaks of the terrible disease. The insanitary conditions became so terrible that masters of ships bound for the port refused to enter, crews of vessels that ventured in were stricken down, and one entire crew perished. Fever is at present raging in the city, and the death-rate, amounts to two hundred daily. Forty-five ships are lying in the river without crews, and twenty have lost their captains, while all the officials of the London and Brazil Bank have been carried off by the scourge. Hundreds of corpses, are afloat in the river in all stages of decay. Yet the trade in bogus meat extracts, goes on yielding immense dividends.

FULHAM VESTRY AND CAMERON'S WRETCHED BILL.

Mr. W. H. Fisher, M.P., has presented a petition from the Fulham Vestry, ably drawn up by the solicitor, against the Bill to amend the Food and Drugs Act, 1875, and the Margarine Act, 1877. The petitioners urge that the provisions of the first and second sections would be conducive to the growth rather than to the prevention of the adulteration of food. The petitioners pray that any amending Act may be an Act dealing generally and exhaustively with the whole subject matter of the said Acts. The petition is signed by Mr. F. O. Drew and Mr. W. J. H. Denselow, the Clerk.

PLAIN SPEAKING TO MAGISTRATES.

At the Borough Police Court, Stockport, on July 18th, two local tradesmen were summoned on the charge of selling margarine as butter. The cases being proved, the Deputy Town Clerk, Mr. H. D. F. Dobson, directed the attention of the Bench to the expense in which these prosecutions under the Food and Drugs Act involved the Corporation. A fee of half a guinea had to be paid the Analyst for every sample submitted to him. There were other charges. Notwithstanding this fact, the Bench had been accustomed to impose fines of 5s. and costs, without allowing advocates' fees or cost of certificate. The Clerk: Except in some cases. Mr. Dobson: There have been no such cases in the borough. The County Authorities allow these costs. Up to the present it has cost the borough a great deal more than the fines and costs to prosecute, and it should be remembered that a maximum penalty of £20 could be inflicted.

THE LAW AND THE PUBLICAN.

Dr. Teed, whose lucid, cogently reasoned criticism of the wretched Bill of Cameron, M.P., did so much to open the eyes of local authorities to the objects of the Cameron clan, has done a splendid public service by a recent report to the Camberwell Vestry. The suggestions are so valuable that we hope they will bear fruit. The legality of the notice dear to the heart of the swindling publican, that "all spirits sold at this establishment are diluted," has often been called in question, and it is Dr. Teed's conviction, based on the fact that the Sale of Food and Drugs Act (1879) gives a definition of rum, whisky, brandy, and gin, that "legal opinion should be taken as to whether any notice in a place licensed for the sale of these liquors would protect a publican for the sale of diluted spirits." Dr. Teed says:—"The licensed spirit vendor is in a peculiar position, he enjoys a profitable monopoly and need fear no competition, and if he then fails to supply the article demanded (which cannot be bought elsewhere, and which he only is allowed to sell) he is surely committing an offence under the Act in supplying another article—diluted spirit, and no amount of labelling or notices ought to protect him. There is a Direct Veto Bill now before Parliament which is much agitating "the trade" as it is called, but on the merits of that measure I do not desire to comment. There is, however, a Direct Veto Bill in actual practice, initiated and carried on by "the trade" to its great pecuniary advantage, and to the corresponding detriment of the public. This is the refusal of the publicans to supply the articles that he, and only he, is licensed to supply, and his substitution of a watery imitation instead, at the market price of the genuine article. If your legal adviser is of opinion that a dilution notice does not protect the vendor of diluted spirits, I would suggest that action be at once taken against such vendors as exhibit these notices. If on the other hand he should be of opinion that in the present state of the law such notices are a bar to proceedings under the Act, I would suggest that such adulteration be stopped in another way. This other way is for you to oppose, at the licensing sessions, the renewal of the licenses of all publicans who exhibit dilution notices, on the ground that they are not carrying out the conditions of their license in not supplying the articles they are licensed to supply." We commend this excellent advice to the notice of our readers.

THE LONDONDERRY GRAND JURY AND THE FOOD AND DRUGS ACT.

The County Analyst reported at the last meeting as follows:—"During the period which has elapsed since the Spring Assizes I have, as instructed by you, made chemical and microscopical analyses of 104 articles of food and drink as follows:—Of whisky 33 samples, rum 11, gin 5, brandy 5, wine 2, coffee 13, tea 10, pepper 9, mustard 6, milk 3, cream of tartar 2, and one each of the following:—Lemonade, arrowroot, cocoa, sweets, and sulphur. The majority of the articles named were found to be pure and of good quality. Only three samples, two of whisky and one of milk, necessitated prosecutions, which were duly instituted, and convictions obtained. The duties of Inspectors under the Sale of Food and Drugs Act were discharged with great intelligence and efficiency by sergeants of the Royal Irish Constabulary, samples for analysis being forwarded from each of the fourteen Petty Sessions districts into which the county is divided, with the exception of Bellaghy.—I am, gentlemen, yours obediently,

"J. R. Leebody, D.Sc., County Analyst."

APPEAL FROM THE DUBLIN MARGARINE CASE.

At the Queen's Bench Division, Dublin, before Mr. Justice Harrison, Mr. Justice Johnston, Mr. Justice Holmes, and Mr. Justice Madden, judgment was given in the case of Fitzgerald v. Leonard, which was an action brought by Mrs. Margaret Fitzgerald, provision merchant, against Mr. John Leonard, egg and butter merchant, for alleged loss sustained by her by reason of the defendant selling to her a quantity of margarine, which was represented to her as being pure butter, and for the sale of which she was fined by the magistrates. The jury had found a verdict for the plaintiff for £25, and the defendant sought to have the finding set aside, and a new trial ordered on the ground of misdirection, and the reception of evidence as to the fine and consequent loss. The Court held that the evidence as to the fine and loss alleged to have been sustained thereby should not have been left to the jury, but they were of opinion that the plaintiff was entitled to nominal damages, and they reduced the amount of the verdict to £3.

ADULTERATION PROSECUTIONS. MILK.

THE WARRANTY AGAIN PROTECTS ADULTERATION.

At West London, on July 21st, Richard L. Spicer, manager for the Metropolitan and Suburban Milk Supply Company, having a branch business at Cornwell Dairy, Turnham-green, was summoned by Inspector Clarke under the Adulteration Act, for having sold milk which was adulterated to the extent of 10 per cent. by the addition of water. Mr. R. F. Finnis, clerk to the Local Board, supported the summons, and Mr. F. W. Reckitts defended. Inspector Clarke stated that he purchased the milk from Alfred Levett (a servant of the company's) early on the morning of the 25th ult. The usual formalities were performed, and he duly received the Analyst's certificate certifying the above mentioned adulteration. By Mr. Ricketts: He was quite sure that Levett supplied him with the milk and produced his note book with his name which was given at the time of purchase. Did not identify the company's servant (who appeared for the defendant in Court). William Warren, the Inspector's assistant, corroborated the last witness, and said Levett was the name given at the time of purchase. Mr. Ricketts for the defence said his client did not dispute the adulteration. He produced a written warrant which was attached to one of the five churns sent to Chiswick from Paddington Station, and he called several of the company's servants who stated they had not tampered with the milk in question. Mr. Finnis for the prosecution admitted that if the magistrate were satisfied with the evidence for the defence, the defendant was, under the 25th section of the Act, permitted to be exchanged from the prosecution. He admitted, however, that each churn should have a written warranty attached to it. Moreover the churns had been sent to Chiswick and were received by the manager there without a warranty. The defendant had admitted that he was not sure which churn had the warranty, and he (the speaker) had proved that the servant who actually sold the milk to the Inspector, was not the one in Court. He should therefore suggest that the defendant had not proved that he sold the milk in the same state as he received it. The magistrate said that in view of the 25th section of the Act he must be satisfied with the warranty which the defendant produced, and under these circumstances the summons would be dismissed but without costs.—Henry A. Loid, of 85, Duke-road, Chiswick, also appeared to answer a summons issued by Inspector Clarke for a similar offence, namely, for having sold milk to which 8 per cent. of water had been added. The defendant pleaded guilty, and said that he sold the milk in the same state as he received it from the wholesale dealer. Mr. Haden Corser informed him that unless he produced a warranty to that effect, his statement was no defence. He would be fined 10s., and 12s. 6d. costs.

A SENSIBLE FINE.

At the Tunstall Police-court, on July 13th, before the Stipendiary (Mr. Harold Wright), the adjourned cases in which Thomas Fellows, farmer, of the Meir, Longton, and Charles Johnson, a servant in his employ, were summoned under the Food and Drugs Act for selling milk from which a portion of the cream had been abstracted without disclosing the fact to the purchaser, on the 29th of April, again came on for hearing. The cases were before the Court at Fenton on the 21st of June, when evidence was produced to show that according to the County Analyst's certificate the milk sold had in one case 30 per cent. of the cream abstracted, and in the other 28 per cent. The cases had been adjourned in order that the samples of the milk might be forwarded to Somerset House for analysis. Mr. Fisher (instructed by Messrs. Hand and Co., of Stafford), appeared in support of the prosecution, which had been instituted by Mr. E. W. T. Knight, the County Inspector, and Mr. Kettle (instructed by Mr. Ramsdale, of Longton), was for the defence. The certificates received from Somerset House stated that the samples submitted had in the one case mentioned at least 14 per cent. of the cream removed, and in the other at least 15 per cent. Mr. Jones, the County Analyst, gave evidence, explaining that the differences between the two analyses were only in their percentages of fat, and these differences, which were only slight, were possibly due to the decomposition of the milk from which the analyses were made. Cross-examined by Mr. Kettle: Witness stated that 3 per cent. of fat was a good standard of what was good milk. It was the fat in the milk which formed the cream. The fat was held in suspension. The result of the milk standing perfectly still was that the fat which was lightest floated to the top, and in the course of an hour or two milk which was perfectly fresh would be skim milk at the bottom. Mr. Kettle: This milk I believe was drawn from a churn with a tap at the bottom. Witness: I don't know. Mr. Fisher: One sample was; the other was from a can. Mr. Kettle: If the milk was drawn from the bottom of the can, there would be a deficiency of fat at the bottom and an excess at the top? Mr. Jones: Possibly so; but it ought to have been stirred up. Mr. Kettle: In hot weather, would not stirring have a tendency to make it sour? Witness: I don't think so. By the Stipendiary: He generally found that multiplying the amount of fat by 3.2 gave the amount of cream. Dr. Bostock Hull, Public Analyst for Warwick, stated that he agreed with the standard of analysis spoken to by Mr. Jarvis of 3 per cent. of fat, which was the recognised standard. He also agreed with Mr. Jones's method. Mr. James Baynes, Public Analyst of Hull, also gave evidence to the same effect. Mr. Kettle, for the defence, stated that he could not resist a conviction, because he could not say the certificate of the County Analyst was not correct. He submitted, however, that there was no deliberate abstraction of the cream, but that it arose from negligence, and he thought a nominal penalty would suffice to show that milk sellers must be careful to stir up their milk before selling. The defendant Fellows went into the box and swore that the milk he sold was new milk, and that there was no adulteration. He admitted

his being fined for selling adulterated milk, but said he recovered the fine from another person. John Barclay, analytical chemist, Manchester, said that cream would not rise in three quarters of an hour sufficient for it to be skimmed off. Jogging about in a milk cart would assist the rising of the cream. By Mr. Fisher: The same effect would be produced if skim milk had been added. The Stipendiary, in giving his decision, said he could not inflict a technical penalty. He was bound in these adulteration cases to mark his sense of how heinous the offence really was, and he always looked upon them as obtaining money from the public by false pretences. He was not taking into consideration the fact that against the defendant there was a former conviction, as he had recovered the penalty in that case from the actual offender. There was no doubt in his mind of the seriousness of this offence, and defendant would be fined £10 and costs—altogether £19 13s. Defendant was allowed a week to pay.

At Southampton, on July 12th, George Gregory, of Crown-street, Highfield, was summoned for selling milk containing 15 per cent. of added water, on July 2. Mr. Keele (Messrs. Pearce and Keele) prosecuted on behalf of the Town Clerk (Mr. R. S. Pearce). Inspector Rabbets stated the case, and the certificate of Mr. Brierley, Public Analyst, stated that the sample submitted to him contained at least 15 per cent. of added water. Defendant was fined in the mitigated penalty of 5s. and costs.

Harry William Fray, of Chilworth, was similarly summoned. Mr. Keele again prosecuted, and Mr. Bell defended. Inspector Powell stated that on Sunday, July 2, he was in Latimer-street about 10.45, and saw a lad, who said he was selling milk for Mr. Henry Fray. Mr. Bell said: What the boy said is not evidence. The Inspector said he had since seen the boy in Mr. Fray's cart. This evidence was also objected to by Mr. Bell, and the witness added that in consequence of what took place the present proceedings were instituted. He was continuing to describe a purchase of milk, but Mr. Bell said it must first be proved that the lad was in the employ of the defendant. Then the Inspector went on to say that a few days after this the defendant came to the office and complained that a sample had not been given to the boy, but witness said it was his own fault, as the boy should have taken the sample offered. He also showed defendant the section of the Act relating to dividing the sample. Defendant said "I am convinced you are right, but you might have given the boy a sample." Mr. Bell's objection was overruled by the Bench, and the Inspector then described what took place when the milk was purchased and the boy declined to take one part of the milk, and said he took the sample in its entirety direct to the Public Analyst. On July 8 he received the certificate produced. Mr. Keele said this stated that the milk contained 4 per cent. of added water. Cross-examined: He did not know that defendant had been in business for 25 years. Mr. Bell said he wished to point out to the Bench that his was really a trivial case. Defendant had had hundreds of samples taken, and this was the first case brought against him. If the law had been broken it was in such an infinitesimal degree that the case might well have been passed over. As regarded the evidence, Mr. Bell contended that section 15 (as to the delivery of samples) had not been complied with, and that the proceedings must therefore fail, for it was well known that the Act had to be carried out literally. It was a purely technical objection he knew, and might defeat the ends of justice, but in this case it would be happily so. Mr. Keele contended otherwise. The Chairman (Mr. Chipperfield) said he agreed with Mr. Keele, but their learned Clerk held that the objection was fatal, and they bowed to his ruling. A second summons against the same defendant was not proceeded with.

George Fray, of Doncaster Farm, North Stoneham, who was represented by his son, was similarly summoned, the allegation in this case also being that the milk contained 4 per cent. of added water. Mr. Keele prosecuted, and Mr. Bell defended. Evidence was given by Inspector Rabbets, and the certificate by Mr. Brierley was put in showing that there was at least 4 per cent. of added water. Cross-examined: Witness did not know anything about cows. In defence, Mr. Bell said that his remarks as to the length of time in business and so on applied also in this case. He drew attention to the fact, that in the information they were charged with selling "milk," and that in evidence it was stated that "new milk" was asked for. The magistrates might look up at him, but there was a great difference, and a case had been decided upon which he relied, as showing that milk was demanded and supplied. He submitted that there was no offence proved. The witness asked for milk and got it. The answer to the case on its merits was far more serious, and it was contended that the really nominal addition of water to the milk was due to the nature of the food taken by the animals. Evidence would be brought to show the milk had not been tampered with. Mr. John Fray said he and his brother milked the cows, and he could pledge his oath that the milk was not in any way tampered with. Mr. Keele said he would not cross-examine the witness as his evidence had nothing to do with the case. Harry William Fray confirmed the evidence of his brother. The Chairman said in the absence of any attempt to upset the evidence of the Analyst, they considered the case proved. But the addition was very small, and they would fine defendant in the least penalty of 2s. 6d. and costs.

At Clerkenwell Police-court, on July 21st, Wm. Fennell, of 65, Clarendon-street, Somers Town, was sued by the St. Pancras Vestry, for selling a pint of milk adulterated with 9 per cent. of added water. Fine of 5s. and 2s. costs.

At Neath, on July 21st, William Sparkles, a farmer, of Skewen, was charged with selling milk on June 23rd which was 15 per cent. deficient in cream. The case was adjourned for a fortnight to secure the attendance of the Analyst.

At Southampton Borough Police-court, Walter Leggatt, 30, Russell-street, who was represented by his wife, was summoned for selling milk which was not of the nature, substance, and quality demanded, on June 25. Mr. Keele (Messrs. Pearce and Keele) appeared for the prosecution, on behalf of the Town Clerk, and it was stated by him that the milk was adulterated with water to the extent of 23 per cent., and that in March last defendant was fined for a like offence. Mrs. Leggatt said she had her milk from Mr. Pocock, but did not have a warranty, and she had sent back some milk to him. Mr. Keele said that the Inspector informed him that he took a sample of Mr. Pocock's milk the same day, and found it pure. The Chairman said it was the bounden duty of the magistrates to see that the milk was pure, if possible. Defendant must pay a penalty of 40s. and costs. Mrs. Leggatt said she should not pay, but would go below. The default was one month's imprisonment. — Edward Clewett, of the Avington Dairy, 24, Oxford-street, was similarly summoned, the added water in this instance being stated to be 6 per cent. Defendant pleaded not guilty, and Inspector Batchelor stated the circumstances of the purchase, which was made from a boy in the street. In defence, Mr. Clewett emphatically denied knowing anything as to the water, but he explained how the absence of some cream was caused. He called Samuel Tanner, agent to Sir Charles Shelley, of Avington Park, Winchester, who said he believed the water in the milk was accounted for by the shortness of food, and the large quantity of water drunk by the cows. This would be found to be the case all over the country. A fine of 10s. and costs was imposed.

At West London Police-court, Henry A. Lord, Duke's-road, was summoned for adulteration to the extent of 8 per cent. Mr. Finnis supported the summons, and the purchase of the milk was proved by Mr. J. Clark, the Inspector. A fine of 10s., with 12s. 6d. costs, was imposed.

At Southwark, on July 19th, Jane Jenkins, dairykeeper, was summoned for selling milk which upon analysis was found to contain 5 per cent. of added water. The magistrate imposed a penalty of £5, and 12s. 6d. costs.—George Cook, for selling milk denuded of its natural cream to the extent of 20 per cent. was fined in a like amount notwithstanding a plea that he sold the milk in the same state as when purchased.

At Warrenpoint Petty Sessions, Sergeant Atwell charged Susan Morgan with having for sale buttermilk adulterated with 35 per cent. of water, exclusive of 25 per cent. allowed for churning purposes. The Bench imposed a fine of 10s. and costs.

At Dublin, on July 20th, Michael Connor, 102, Upper Church-street, was charged with having sold to Timothy Lyons a halfpenny worth of buttermilk which was adulterated with added water to the extent of 60 per cent., exclusive of 25 per cent. allowed for churning purposes. Mr. Lyons, Food Inspector under the Corporation, was examined, who proved that he purchased the milk and handed it over to Sir Charles Cameron, City Analyst, who found on analysis that it contained 60 per cent. of added water. Mr. O'Donel imposed a fine of £5.—A. Hewitt, 72, Capel-street, was summoned at the instance of Henry Greene, an Inspector of Food under the Corporation, for having sold him a pennyworth of new milk which was deprived of two-thirds of its fats. Sir Charles Cameron gave evidence in support of the charge, stating that the reduction of fats or cream was equal to an addition of 20 per cent. of added water. A fine of £2 was imposed.—Mary Moore, 10, Marlborough-street, was fined £5 for having sold a halfpenny worth of buttermilk, which was adulterated by added water to the extent of 50 per cent., to John J. Kane, a Food Inspector, but on stating that she would appeal to the Analysts at Somerset House to have Sir Charles Cameron's analysis revised, Mr. O'Donel said he had intended to impose a fine of £5, but on the application of defendant, who relied on a certificate of Professor Tiehborne, he allowed a sample to be forwarded to Somerset House.—Michael Coady, 92, Marlborough-street, was fined £1 for having sold a pennyworth of new milk adulterated with 8 per cent. of added water, on the 14th June last, to one of the Inspectors of Food under the Corporation.

At Wallasey Petty Sessions, John Lucy, Seacombe, was summoned for selling adulterated milk. Mr. W. H. Hallard, Inspector of Food and Drugs under the County Council, deposed that on the 8th June he purchased a pint of milk. He divided the milk into three bottles, one of which he kept, one he gave to the youth, and the other he sent to the County Analyst, who certified that the milk was adulterated with 10 per cent. of water. For the defence it was stated that the milk was sold just as it was received from Birkenhead Station, where it came from various country farms. A fine of 10s. and costs, in all £1 4s. 6d., was imposed.

At Reading Police-court, on July 18th, Alfred Finch, 1, Mount-pleasant, Reading, was summoned for selling adulterated milk, on June 23rd. Mr. Stevens, Deputy Town Clerk, prosecuted, and said that on the day in question Mr. Robertson, Sanitary Inspector, purchased a pennyworth of milk from defendant. A certificate from Mr. Alfred Ashby, the Public Analyst, showed that not less than 20 per cent. of fat had been extracted from the milk. Mr. Ruff, who defended, stated that it had been found that a continual dipping into the milk whilst serving it to customers caused a diminution in the fat contained in the milk. From a case which came before a Middlesex Analyst it was shown that in serving milk a diminution of one-third of the cream had taken place by the time the tin was half empty. The defendant stated that he had one gallon of milk brought every morning. On the day in question (at 6.5 a.m.) he took it from the man himself and put it into the pan. He was there till 8.30, when he left his shop to go his rounds. The milk had not been

touched. Mrs. Finch said she was not in the shop when the milk came in. She took charge of the shop at 8.30, and at 10.30 when Mr. Robertson came in she had sold about half of it. Up to that time no one had tampered with the milk. The Chairman mentioned that in spite of Mr. Ruff's reference to a case where it had been proved that by frequent dipping the cream had been reduced, there was a strong case decided by Lord Coleridge and another Judge where that was no defence. The Bench had no alternative but to convict. Although the defendant might have sold the milk in the same condition as he bought it, it was not a sufficient excuse, as the defendant could have made himself absolutely free by insisting upon a written warranty from the person of whom he bought the milk. They would inflict a fine of £1 and 19s. 6d. costs, or in default 7 days.—James Chapman, of 6, Silver-street, was summoned for a similar offence. Mr. Stevens remarked that in this case a sample was taken on June 23rd, and after being submitted to the Public Analyst a certificate was received stating that the milk was adulterated with not less than 10 per cent. of water, and that not less than 41 per cent. of fat had been abstracted from the milk. Wm. Henry Robertson said that on June 23rd he went to defendant's house and asked for a pennyworth of milk. Defendant's wife was in the shop at the time and served him. He divided the milk according to the Act, and gave one sample to the defendant's wife, sent one to the Public Analyst, and kept a third himself. On the 26th June he received the certificate (produced) from the Analyst, which stated that not less than 10 per cent. of water had been added to the milk, and that not less than 41 per cent. of fat had been extracted. Defendant denied that the milk had been tampered with whilst it was in his possession, and at some length contended that he was at the mercy of the man from whom he bought the milk. The Bench imposed a fine of £2 and 18s. 6d. costs.

At the Ystrad Police-court, on July 17th, Thomas Thomas, milk vendor, Treorky, was summoned for selling milk containing only 80 parts of genuine good milk, and deficient to the extent of 20 per cent. of fat, and adulterated with 5 per cent. of water. Inspector Jones, Pentre, proved the sale. Dr. Williams, Medical Officer of the County Council, stated that milk of the same quality as the sample purchased of the defendant would be injurious to the health of infants and invalided persons depending chiefly upon milk for their sustenance. The defendant urged that he had not adulterated the commodity, and attributed the deficiency in fat to the rising of the cream to the surface in the recent very warm weather while he measured out the milk with the tin cup in small quantities on his rounds. The Inspector purchased the sample when the milk was very low in the can or almost sold out. Previous convictions were recorded against the defendant. He was fined £2 and costs for selling milk from which fat had been abstracted, and £1 and costs for adulterating it with water, amounting altogether to £5 9s. 6d.

IMPORTANT POINTS UNDER THE FOOD AND DRUGS ACT.

At the Rugby Police-court, on July 18th, John Smith, milk seller, New Bilton, Rugby, was charged with selling milk that was adulterated with 12 per cent. of added water. Mr. Fulcher, the Inspector for the Rugby Rural Sanitary Authority, said he took the sample at New Bilton and told the defendant that it was for analysis. The defendant's solicitor made two technical objections—first, that the Inspector did not tell the defendant that it was for analysis "by the Public Analyst," and secondly, that he did not take the sample when the defendant was actually serving the milk, as required by the Act. As a matter of fact the defendant, who lived at New Bilton, did not serve any milk until he got into Rugby, and the Inspector went to him in the road just as he was starting on his round. The magistrates held that the objections were fatal and dismissed the case.

At Liverpool, on July 19th, Elizabeth Watson, 9, Springfield-street, was summoned for selling skim milk which, on analysis, proved to contain upwards of fifteen parts of water to every hundred parts of milk. A fine of £3 and costs was imposed.—Lawrence Briggs, 4, Morgan-street, was summoned by Inspector Webster for selling new milk which was found to contain upwards of fifteen parts of water to every hundred of the poorest milk, and also for selling skim milk which contained upwards of ten parts of water. Fines of £3 and costs and £2 and costs were imposed.—Thomas Hutchinson, milk dealer, 6, Jenkinson-street, was fined £3 and costs for selling new milk which on examination proved to contain upwards of thirteen parts of water to every hundred parts of the poorest milk.—William Young, of 43, Zante-street, was fined 20s. and costs for selling milk, to every hundred parts of which, had been added five parts of water.—Sarah Williams Davies, of Helsby, was summoned by Inspector Baker for supplying milk to R. Rigby, of Liverpool, which on analysis was found to contain upwards of ten parts of water to every hundred parts of the poorest milk, and was fined £5 and costs.—A summons was heard against Thomas Ellams, of Wood Farm, Ince, and Elton, Cheshire, for selling milk to S. Worthington, Liverpool, which had been watered to the extent of nine parts to every hundred. Inspector Baker deposed to taking a sample from one of the cans on arrival at Lime-street Station. A fine of £5 and costs was imposed.—John Davies, of Sutton Weaver, was summoned by Inspector Baker for selling two cans of milk to R. Constantine, Liverpool, which were found on analysis to be diluted with water to the extent of upwards of nine to every hundred in one case, and eight parts in the other. Mr. Jenkins (Jenkins and Unsworth, Warrington) defended, and pleaded that the milk had been considerably deteriorated in quality in consequence of the hot weather. There was scarcity of fodder, and the cattle consequently drank inordinately, with the result that the milk was considerably mp aired. Penalty of £7 and costs in each case.

WHISKY.

At Wakefield Petty Sessions, Sarah Kay, landlady of the Saw Inn, Flockton, was charged with selling adulterated whisky. Mr. Talbot Kyle, Inspector under the Food and Drugs Act for the County Council, said that on the 1st June he visited the public-house named, and obtained from Mrs. Kay a half-pint of Irish whisky. He told her for what purpose he wanted it, and he divided it in the usual way, sending one portion to the Public Analyst, whose certificate stated that it contained 4 per cent. excess of water. The defendant said the whisky had not been adulterated with her knowledge. Fined 5s. and £2 Os. 2d. costs.

VINEGAR.

At Liverpool Police-court, on July 19th, before Mr. Stewart, Stipendiary, John Martin, of 29, Netherfield-road South, was fined 10s. and costs for selling vinegar, which on analysis by Mr. Brown, was found to contain upwards of 80 per cent. of distilled acetic acid. Superintendent Baker proved the case.

PAREGORIC.

At Old Hill Police-court, on July 19th, George Hadley, stationer, Black Heath, was charged under the Food and Drugs Act, with selling a drug—namely, paregoric—not of the nature and substance demanded. It appeared that Elizabeth Toye, an assistant, visited defendant's shop on the 7th, and asked a youth named Baker for paregoric, and he supplied her with fourpennyworth. A portion was sent to the Public Analyst, and his report stated that there was no opium in it, which is a most active ingredient in the proper article. Defendant stated that he was prohibited from selling paregoric, and he did not sell it, because the boy gave Toye stuff out of a bottle labelled, "Paregoric elixir." The boy asked her if that was what she meant, and she said "Yes." The Bench dismissed the summons.

MEAT.

At Stockton, on the 14th inst., John Hutchinson and his son, Thomas Hutchinson, butchers, were charged with having a diseased carcass of beef deposited for sale that was unfit for human food. Mr. Archer prosecuted for the Corporation, and Mr. Jaynes, Darlington, defended. The defence was that the son was merely a servant of his father, who had given instructions for the animal to be slaughtered at the farm where he bought it, and taken to his slaughter-house, but it being late at night when the son returned, it was placed in the house, and the father did not see it till the Inspectors called, and then had purposed not selling it, but using it for his family's food. Having been several times before convicted, the last time so recently as April, when he was fined £20 and the son £5 the Bench committed the father to gaol for a month without the option of a fine, and fined the son £10 and costs.

LARD.

At the Ystrad Police-court, on July 17th, Giles Mills, grocer, Ton, was summoned for selling half-a-pound of mixture containing 50 per cent. of lard and the same quantity of cotton seed oil. Inspector Jones stated that on the 17th ult. he entered the defendant's shop, and having been supplied with half-a-pound of butter, asked the defendant if he sold lard. The defendant replied that he sold lard and lardine, but very little of the latter, as it was only used in making pastry. The Inspector, suspecting that the defendant sold lardine as lard, called in the evening upon a landlady in the locality requesting her to go to the defendant's shop and purchase half-a-pound of lard and a few other articles. The defendant remarked that she could have either bladder or bucket lard. She was supplied with half-a-pound of the mixture in the bucket, and 3d. was charged for it, the retailed price being 6½d. per pound. She then bought other commodities, and a bill was given her, the mixture being recorded on it as lard. Immediately after the landlady came out of the shop Inspector Jones went in and informed the defendant that the mixture which the woman had purchased had been bought for the purpose of having it analysed by the Public Analyst. Defendant did not wish to have the sample divided. Dr. Williams, Medical Officer to the County, deposed that the cotton-seed oil had been added to the lard for the purpose of increasing the bulk of the commodity. The oil was not poisonous, but it was not fit for human food. The Bench remarked that they believed the defendant was not aware the mixture was so inferior as had been proved. A fine of £2, including costs, was imposed.

PEPPER.

At Killagan Petty Sessions, on July 19th, before Messrs. L. G. P. Filgate, J.P. (chairman), William Orr, B.L., R.M., and Alexander Robinson, J.P., Acting-Sergeant M'Givney, Ballymena, Inspector of Food and Drugs, charged Hugh Calwell, Bellaghy, with having sold a quantity of pepper which was found to be adulterated. Mr. Alexander Caruth, sen., Ballymena, appeared for the defendant. The Analyst's certificate showed that the pepper in question contained 2½ per cent. of earthy matter, but in reply to this, Mr. Caruth pointed out very clearly that it was impossible to obtain black pepper without an admixture of clay, this more or less adhering to the pods. The case was dismissed without prejudice.

COFFEE.

At Killagan Petty Sessions, on July 19th, Catherine M'Ferran, Glenbuck, was also charged with having sold coffee which, according to the Analyst's report, contained over 80 per cent. of chicory. Mr. A. Caruth, sen., who appeared for the defence, stated that the article in question was sold as it had been bought, and that the label on the canister or bottle was plainly marked "coffee and chicory." Their Worships imposed a fine of 5s. and costs.—Samuel Millar, Dunloy, was summoned for selling coffee mixed with chicory, and a similar penalty was inflicted.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

WEST HAM.

Mr. Charles Sanders, M.B., M.R.C.S., Medical Officer of Health for West Ham, in his annual report for 1892, says of the general sanitary work:—

"The systematic examination, throughout the Borough, of nuisances arising from various causes, as well as the inspection of slaughter-houses, bakehouses, and dairies, has been carried out during the year. In November, by the resignation of your Chief Inspector of Nuisances, Mr. William Horn, the Council lost the services of a tried and valuable officer, and marked its appreciation of the faithful manner in which, during many years, he carried out his duties, by granting him a retiring pension. In consequence of the above resignation, I reported on the strength of the Sanitary Staff, which I showed, as in my memorandum of October, 1891, to be considerably undermanned. After consideration of my report the Council decided to appoint four additional Assistant Inspectors of Nuisances, all of whom have been appointed, and, at the time of writing, are doing excellent work in their various districts. Among the chief nuisances arising from factories or trades which engaged the attention of the Inspectors may be mentioned the following:—Palmer & Co.'s Candle Works (engine driving fan broke down) nuisance arising from burning fat and other refuse at rear of Mr. Bruckner's, pork butcher; Messrs. Everest & Co., Caramel Factory, Northern-road, Plaistow; Messrs. Blackwell & Co. and Messrs. Cumber and Johnston, varnish makers, Sugar House-lane; Messrs. Schmidt, varnish works, Carpenter's-road. Considerable trouble was caused by house refuse and other offensive matter being brought into the Borough from outlying districts and deposited so as to be a nuisance. In the case of refuse deposited at the G.E.R. Goods Depot, Carpenter's-road, the nuisance was abated after correspondence with the company's engineer. In March several barge-loads of refuse were brought across the river from Woolwich and deposited at Silvertown. This nuisance was stopped at once by the Town Clerk. Other areas dealt with for the same cause included land on the east side of Manor-road, and land on the south side of Sophia-road. Nuisances arising from three fish-skin dressing businesses were dealt with. In May a Mr. Dunk made application for leave to carry on this offensive trade in the Beekton-road, but the Council refused permission. I have reason to believe that the business is occasionally carried on there surreptitiously, but have not yet been able to get proof.

"Another constant cause of complaint arises from the collection of fish offal, and frequent inquiries are made as to when the nuisance will be stopped. As will be seen in the list of prosecutions below, the Council obtained a conviction under the Metropolitan Police Act, for conveying offensive matter, to wit, fish offal, through the Borough between the hours of 6 a.m. and 12 p.m. Since this conviction I have had correspondence with the Medical Officer of Health to the County Council, and am informed that the London Council are considering, and will shortly pass byelaws and regulations dealing with this matter. I would therefore urge upon the Council the advisability of waiting till the above regulations are passed, and of then considering the desirability of adopting the hours of collection enforced within the Metropolis. It may be within the power of the Council to enforce the collection between the hours of midnight and 6 a.m. (the above case tried was undefended), but I feel sure such a course would magnify the nuisance instead of abating it. Fresh fish offal is not a nuisance, but after standing for some hours it smells intolerably. If, then, the collection is only allowed between midnight and 6 a.m., it is evident that the offal will be allowed to remain at many fishmongers' houses for several days uncollected. Again, small collections will be deposited on vacant lands, up yard entries, and in nooks and corners, all over the Borough, and unfortunately the Borough is simply studded with little plots of vacant land which are already but too well known to persons with rubbish to throw away. As, therefore, it is highly desirable that a workable system should be formulated for ensuring the daily collection of fish offal without nuisance to the general public, and, at the same time, without causing such unnecessary hardships to all fishmongers as the strict observance of the prohibitive hours above mentioned would entail, and looking to the fact of the close contact of the Borough with the Metropolitan area, there appears to me to be every reason why similar regulations should, in this matter, be enforced in the two districts."

The following cases of fines and prosecutions for adulteration, are given by Mr. Sanders, and are instructive, inasmuch as they show that in not one single instance was the full penalty allowed by the Acts imposed. Yet these fines are higher by at least 50 per cent. than those generally imposed in London and country police courts. They show how little encouragement magistrates give Local Authorities in suppressing fraud and encouraging native industries.

Cause of Prosecution.	Result.
Selling coffee adulterated with 70 per cent. of chicory.	Fined £1, and £1 1s. costs.
Selling as coffee a mixture containing 65 per cent. of chicory.	Dismissed. Held that the label outside package was protection.
Selling as butter an article containing 8 per cent of foreign fats.	Fined £1, and 17s. 6d costs.

Selling milk adulterated with 14 per cent. of added water.	Fined £2, and 19s. 6d. costs.
do. do. 18 per cent. do...	Fined £4, and 17s. 6d. costs.
do. do. 13 per cent. do...	Fined £3, and 17s. 6d. costs.
do. do. 13 per cent. do...	Fined £3, and £1 2s. 6d. costs.
do. do. 14 per cent. do...	Fined £3, and £1 1s. 0d. costs.
do. do. 12 per cent. do...	Fined £3, and 17s. 6d. costs.
Selling butter mixtures adulterated with 90 per cent. margarine.	" £3, " £1 6s. "
do. do. 85 per cent. do...	" £3, " £1 4s. 6d. "
do. do. 75 per cent. do...	" £3, " £1 1s. 0d. "
do. do. 85 per cent. do...	" £3, " 18s. costs.
do. do. 95 per cent. do...	" £3, " 18s. "
do. do. 90 per cent. do...	" £3, " 18s. "
do. do. 85 per cent. do...	" £3, " 18s. "
Selling coffee adulterated with 25 per cent. chicory.	" £1, " 17s. 6d. "
do. do. 25 per cent. do...	Dismissed.
Exposing 89 pieces of mutton and 12 of beef unsound.	Fined £10, and £3 4s. 0d. costs.
Exposing 44 pieces of mutton and 1 of beef unsound.	Fined £10, " £1 17s. 6d. costs.
Exposing for sale 8 lbs. of plums and 4lbs. of tomatoes unsound.	Fined £2, and 10s. costs.
Selling milk adulterated with 12 per cent. added water.	Fined £10, and £1 2s. 6d. costs.
do. do. 24 per cent. do...	Fined £5 and £1 1s. costs.
do. do. 5 per cent. do...	Withdrawn.
do. do. 19 per cent. do...	Fined £3 and 17s. 6d. costs.
do. do. 19 per cent. do...	" £5 and £1 1s. "
do. do. 28 per cent. do...	" £5 and £1 10s. "
do. do. 5 per cent. do...	" £1 and £1 1s. "
do. do. 8 per cent. do...	Adjourned.
do. do. 8 per cent. do...	do.
do. do. 7 per cent. do...	Fined £1 10s. and 19s. costs.
do. do. 20 per cent. do...	" £5 and £1 1s. "
do. do. 20 per cent. do...	" £3 and £1 4s. "
do. do. 21 per cent. do...	" £5 and 17s. 6d. "
do. do. 14 per cent. do...	" £2 and £1 1s. "
do. do. 28 per cent. do...	" £5 and £1 1s. "
do. do. 22 per cent. do...	Dismissed.
do. do. 30 per cent. do...	Fined £5 and £1 1s. costs.
do. do. 18 per cent. do...	" £4 and £1 1s. "
do. do. 18 per cent. do...	" £3 and £1 1s. "
do. do. 7 per cent. do...	" £1 10s. & 17s. 6d. "
do. do. 40 per cent. do...	" £10 and £1 1s. "
do. do. 25 per cent. do...	" £3 and 17s. 6d. "
do. do. 14 per cent. do...	" £2 and 17s. 6d. "
do. do. 15 per cent. do...	" £3 and £1 1s. "
Selling coffee adulterated with 35 per cent. chicory.	" £2 and 17s. 6d. "
do. do. 55 per cent. do...	" 5s. and 17s. 6d. "
Selling butter adulterated with 85 per cent. margarine.	" 10s. and 17s. 6d. "
do. do. 90 per cent. do...	" £3 and 17s. 6d. "
do. do. 90 per cent. do...	" £3 and 17s. 6d. "
Consigning milk diluted with 8 per cent. added water.	" £2 and £1 8s. 6d. "

Dr. Sanders has infused a great deal of needed activity into the inspection of food stuffs, for example:—

The quarterly report of the West Ham borough Analyst states that forty-eight samples of food have been analysed during three months. Of these thirteen, or rather more than 27 per cent., were found to be adulterated. Among the forms of adulteration detected were the admixture of wheaten meal with mustard, the substitution of margarine for butter, the admixture of chicory with coffee, the dilution of spirits, and the abstraction of cream from condensed milk.

We are pleased to see that the Acts are being more vigorously administered in this borough. In 1891 for a population of 204,902 only twenty-four samples were taken. The present rate of forty-eight per quarter is a distinct advance, being equal to 192 per annum, which is, however, lower than advised by the Local Government Board, who recommend one sample per 1,000 of the population. But even the Local Government Board's figures are too low. St. George's, Hanover-square, took, for example, 392 samples, for a population of 78,362, being at the rate of one sample per 200 of the population. To effectually cope with adulteration, the number of samples taken should not be lower than this percentage. Were the Adulteration Acts thoroughly enforced the result would be increased employment for many thousands of labourers, now driven from agriculture by foreign and home "Free Fraud" in butter, milk, lard, cheese, and other food stuffs. Apart from the question of the plunder of the public, the result of so much labour being thrust from the land into places like West Ham, is to make harder the struggle for existence amongst unskilled workers. Were London vestries to rigorously enforce the Adulteration Acts there would soon be seen a great change in this respect, but unhappily it is the working class vestries who take the least thought of their own interests. Newington, for instance, took only 81 samples in 1891, and Holborn only 47 samples.

ANALYSTS' REPORTS.

LEEDS.

Report on analyses made for the City of Leeds during the quarter ending June 30th, 1893. The following samples have been received:—Milk, 23; skim milk, 1; butter, 2; cheese, 4; lard, 8; tinned peas, 1; tinned lobster, 2; coffee, 2; soda water, 9; cream of tartar, 1; seidlitz powder, 1; total 54. One of the samples of milk was adulterated with 16½ per cent. of water, as compared with the lowest quality of genuine milk, and 3 were reported to be of low quality. The sample of skim milk was adulterated with 16 per cent. of water. Two of the samples of cheese contained only half the average proportion of fat; such cheeses should only be sold as *Skim Milk Cheese*. One of the butters was adulterated with 90 per cent. of foreign fat. Of the lards, three were of low quality, containing traces of foreign fat. The tinned peas contained copper, corresponding to one-fifth of a grain of copper sulphate per pound. The tinned lobsters contained traces of compounds of tin and lead. In the samples of soda water, the proportion of sodium bicarbonate varied greatly, one sample containing as much as 308 grains per gallon, 3 samples averaged 28 grains, whilst 3 other samples contained less than 3 grains, and 2 samples contained no soda, being simply water charged with carbonic acid gas. In the *British Pharmacopœia* the proportion of sodium bicarbonate is fixed at 240 grains per gallon. The term soda water is, however, wrongly and frequently used for aerated waters, which do not contain any soda. The other samples were genuine.

THOMAS FAIRLEY.

REVIEWS AND NOTICES OF NEW BOOKS.

The Traders Manual of the Weights and Measures Acts, by G. Phillips, Certificated Inspector for the County of Rutland. Publisher, Alf. Cooke, Leeds. Price 6d.

This is a very useful manual for the Trader as well as the Inspector, containing the Weights and Measures Acts, 1878 and 1889, abridged for the use of traders, points for traders, sale of bread, of coal, and of intoxicating liquors, mems for traders on the Weights and Measures Act, notes on the care and use of weights, measures, and instruments, list of legal weights and measures and metric equivalents. The manual is excellently compiled, the attitude of the author towards traders being not only absolutely fair but helpful. Inspector Phillips says, "in a large number of cases Inspectors find that ignorance rather than a desire to evade the provisions of the Act, is the cause of prosecutions." With the object of throwing some light on the enactments which affect those who use weights and measures and weighing instruments, and to enable a trader to know how to proceed in respect thereto, this book has been written. It is a manual that should be in the hands of every trader and every Inspector.

Lectures delivered under the auspices of the Sanitary Institute, the Yorkshire College, the Boroughs of Halifax, Huddersfield, and Sheffield, and the West-Riding County Council:—No. 1. Sanitary Inspection with reference to Infectious Diseases, by Dr. Theodore Thomson, M.A., Local Government Board Inspector. No. 2. *Some Legal Difficulties in Sanitary Work*, by Henry Sayer, Esq., Deputy Town Clerk, Sheffield. Publishers, J. Broadbent & Co., New-street, Huddersfield. Price 6d. each.

In these days of too many flashy lecturers and rubbishy books, making up in verbosity what they lack in earnestness and knowledge, it is a pleasure to come across a series of lectures delivered by men who have the practical acquaintance of every-day work in connection with the subjects about which they deliver themselves, and Sanitary Inspectors will find much that is useful in these lectures. Dr. Thomson's lecture gives in plain language a series of instructions to Sanitary Inspectors of exactly the character required, and the remarks upon procedure, and precautions necessary to prevent the spread of disease are timely and useful. Smallpox, typhus fever, enteric fever, scarlet fever, diphtheria, measles and cholera are each dealt with, the incubation periods given, and also practical instruction as to the Sanitary Inspector's duty in regard to each. There is a small objection we have to take to Dr. Thomson's lecture. He uses the term Inspector of Nuisances. We confess it is a term we do not like, and it is moreover not one that is really applicable to a Sanitary Inspector. That there are nuisances more than enough existing we would not deny. Parliament has several hundreds of them. Journalism teems with them, the Army, the Navy, the Church and the Stage have a large percentage, the Stock Exchange has them in as pestilential a form as any stricken land could suffer, the quack medicine nuisance bribes our press and our writers, but there is no inspection of these and a myriad of equally objectionable nuisances. A Sanitary Inspector has to put down some nuisances, but he is not an Inspector of Nuisances, and it is time Local Authorities and others ceased to apply to him a title which is as incorrect as it is offensive.

Mr. Henry Sayer's lecture is a valuable contribution on the legal difficulties in connection with Sanitary work, and is mainly devoted to the clauses of the Public Health Act (sec. 91 *et seq.*), and Mr. Sayer's long experience as an advocate in prosecutions for the Corporation of Sheffield enables him to present a mass of information as to the form in which notices should be filled up, the varying decisions of High Courts on points affecting the Sanitary Inspector's work, the manner in which evidence should be prepared, etc., that Sanitary Inspectors will do well to avail themselves of. It is a lecture we can cordially recommend to our readers.

CORRESPONDENCE.

SIR CHARLES CAMERON, M.P., HIS BILL AND HIS BUNKUM.

To the EDITOR of FOOD AND SANITATION.

SIR,—The good man Pecksniff rebuking his enemies was nothing to Sir Charles Cameron, M.P., lolling in Shagpatian splendour, and drinking in gallons of fulsome insincere compliments at the dinner of the trade journal-hocussed-grocers.

A Mr. Thomas Lighton toasted the "Houses of Parliament" in general, and the brand-new baronet in particular. Mr. Lighton wished "they had many more such men in the House of Commons," a calamity which for my part I hope heaven will preserve England from. The obstinate subject of this ill-merited eulogy landed Mr. Lighton in return as follows:—He was afraid their Lordships of the Upper House would not consider him qualified to speak on their behalf, and therefore he would pass on to the House of Commons, of which they hoped soon to see Mr. Lighton a member—(hear, hear)—and on behalf of that House he returned thanks for the toast. As to his Food and Drugs Act Amendment Bill, it was introduced to remedy various grievances under which members of their trade laboured, and although it had met with a certain amount of opposition, that was due less to party than to the "pure cussedness" of some gentlemen who objected to any form of legislation, no matter how it might have been preceded by fair discussion. He did not think that on the adulteration question one could ask the House to legislate without inquiry, and what he asked for was an inquiry. (Hear, hear).

Now, Mr. Editor, considering that even his own constituents have already informed Sir Charles Cameron, M.P., that his Bill was not introduced to remedy any such grievances, and Vestries and Town Councils, Public Analysts and Food and Drugs Inspectors' Experts, concerned with the suppression of adulteration—have opposed his Bill because, were it to become law, it would be impossible to punish anyone for fraud what Sir Charles Cameron calls "pure cussedness" is the determination that thievery of the public shall not be made universal, and that margarine, for example, shall not be sold everywhere as butter to the injury of English and Irish dairy farmers, which would be the case if Sir Charles Cameron, M.P., and the clique whose tool he is had their way. Every honest grocer is anxious for a committee to enquire into the question of adulteration, but it must be a committee to go thoroughly into the whole question of the extent of adulteration; its effect on various branches of native commerce; the causes of the partial failure of the present Acts; and the remedies necessary to effectually stamp out adulteration. But that is not what Sir Charles Cameron, M.P., or the gang of adulteration fostering grocers' enemies who prompt him desire. If Sir Charles Cameron, M.P., would agree to press the Government to appoint such a committee to enquire into the whole question—not now at the fag end of the session, but at the beginning of the next session—with power to call manufacturers, wholesale dealers, retailers, brokers, Public Analysts, Food and Drugs Act Inspectors, prosecuting solicitors for local authorities, Vestry Clerks, and all concerned in defending or suppressing adulteration, he would find no opposition to his desire; but Sir Charles Cameron, M.P., has up to now sought objects entirely different to that of suppressing adulteration, and it is well for English and Irish industrial prosperity that his plans have been exposed, and his thoroughly dangerous Bill opposed as it has been, and, I hope, will be until a real Adulteration Act is brought into the House of Commons.

A meeting not long ago of grocers of my town shows the real objects of the Grocers' Associations much better than Sir Charles Cameron's "bunkum" did.

"INSPECTORS ON THE WAR PATH.

"Mr. H. G. Evershed thought it advisable traders should be on the alert. An Inspector was about town inquiring for flask oil. He entered the shop and asked for the article, leaving samples in the usual way, although in one instance the shopkeeper stated he did not request to be supplied with olive oil. It was quite as well that the trade should be acquainted with this information.

"Voices: Thank you very much.

"Mr. Collings said inquiries were also being made with regard to pepper and mustard.

"Replying to a question, Mr. H. G. Evershed remarked there had been several convictions with regard to flask oil, but not with olive oil.

"Mr. Blaker thought it was matter for congratulation that they had got an independent gentleman in the person of the President on the Brighton bench. (Hear, hear.) The sooner they got a few more like him the better."

Why so many voices should chorus "Thank you very much" has only one explanation. They belonged to gentry who were selling the spurious oil, and who would be able to watch that the Inspector did not get it if their ordinary customers did.

The thanks of the meeting that a grocer was on the bench explains itself. It is regrettable to see my fellow tradesmen so blind to their real interests. It is the cheap and nasty adulterated margarine and like rubbish that has brought the grocery trade to its present cut-throat state, and your journal has earned the gratitude of every grocer who values his reputation for the able manner in which you have pointed this out.—Yours, etc.,

BRIGHTON GROCER.

To the EDITOR of FOOD AND SANITATION.

CHEMISTS' CHARGES.

Sirs,—Perhaps you will be good enough to express an opinion with regard to the following case, which occurred recently:—Entering the retail department of a wholesale chemist in Glasgow, I presented a doctor's prescription to be made up, meanwhile enquired as to charge for same. On being informed 2s. 6d., I remonstrated, upon the grounds that said prescription had already been supplied by a retail chemist in the suburbs of the city at 2s.; but as it was supposed this firm dispensed medicines at Wholesale Prices, I naturally expected to obtain it cheaper. I received the bottle, however, and paid 2s. 6d. This seeming injustice prompted me to enquire as to the nett cost of production, which resulted in the discovery that 7 ingredients, as it contained, the nett cost amounted to a fraction less than 6d. Proceeding still further, I purchased the same article from a popular retail chemist in town, who charged me 1s. 2d. for the identical prescription. Under the Pharmaceutical Society Laws, the recognised maximum charge for a similar 10 oz. bottle prescription is 2s. I approached the first-named firm and demanded a rebate, but they refused to comply, stating that *that was their charge*. I consider this case one of pure robbery, and the attention of the public ought to be drawn to that gulling system of firms, who deceive you by pretending to supply "medicines carefully dispensed at Wholesale Prices."—I remain, etc.,

Cardross, Helensburgh,

FAIR TRADER.

Our correspondent invites us to express an opinion, and we have no hesitancy in doing so. We have found by experience that "popular" chemists' prescribing is as dangerous as it is cheap. The drug stores "sweating" rascal has as little conscience as the co-operative store "sweated" employé has knowledge. An ounce of fact is worth a ton of assertion. Of three prescriptions made up for the Chelsea Vestry by London co-operative stores, one was found on analysis to contain 29 per cent. of Iron and Ammonium Citrate short in weight, another 51 per cent. short in weight, and 57 per cent. too much lead was present in the third of the samples. Seventeen samples out of fifty samples had ten per cent. over or under the amount of the drug prescribed. The meaning of this is that care and knowledge must be paid for, and that the man or woman who visits the "drug store," the Civil Service Somerset House governed hive of ignorance, or the "sweated" co-op. is an ass. The chemist's training and education cost money, and his time is worth money, and for our part we do not agree that half-a-crown for making up a prescription of seven articles is "robbery." On the contrary, we think it little enough pay—i.e., assuming the prescription was carefully dispensed, and the articles unadulterated.

AGRICULTURAL IMPORTS.

Account shewing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended July 22nd, 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities.	
	1892.	1893.
Animals living:—		
Oxen, bulls, cows, and calves	Number	11,014
Sheep and lambs	"	10,478
Swine	"	237
Fresh meat:—		
Beef	Cwts.	32,668
Mutton	"	63,867
Pork	"	1,222
Salted or preserved meat:—		
Bacon	"	80,968
Beef	"	2,591
Hams	"	31,444
Pork	"	4,965
Meat unenumerated, salted and fresh	"	2,249
Meat preserved, otherwise than by salting	"	24,432
Dairy produce and substitutes:—		
Butter	"	31,719
Margarine	"	20,217
Cheese	"	94,508
Condensed milk	"	6,819
Eggs	Gt. Hundr.	202,546
Poultry and Game	Value £	2,769
Rabbits, dead (not tinned)	Cwts.	20
Lard	"	16,219
Corn, Grain, Meal and Flour:—		
Wheat	"	1,123,985
Wheat Meal and Flour	"	282,215
Barley	"	86,741
Oats	"	327,046
Pease	"	32,195
Beans	"	87,865
Maize or Indian Corn	"	928,146
Fruit, Raw:—		
Apples	Bush.	19,544
Oranges	"	8,208
Lemons	"	23,747
Cherries	"	14,051
Plums	"	18,901
Pears	"	16,473
Grapes	"	1,498
Unenumerated	"	49,769
Hay	Tons. †	—
Hops	Cwts.	253
Vegetables:—		
Onions, raw	Bush.	84,232
Potatoes	Cwts.	113,556
Unenumerated	Value £	28,004

* Not separated in 1892. † Not rendered in previous year.

Statistical Office, Custom House, } T. J. PITTAR.
London, July 24th, 1893.

Food and Sanitation.

SATURDAY, AUGUST 5, 1893.

NOTICE.

All communications for the Editor to be addressed to the Editor, 183, Strand, London, W.C.

Advertisements to be addressed to The Publisher, and if intended for the current issue should reach the Office, 183, Strand, London, W.C., by Thursday morning.

COUNTY COUNCILS AND ADULTERATION.

THE Bedfordshire County Council some time ago adopted the following sensible resolution:—

THE ADULTERATION OF BEER.

"That in the opinion of this Council it is desirable that all vendors of beer which contains ingredients used in substitution for malt or hops, should be required by law to supply to each purchaser at the time of delivery a notice by a label distinctly and legibly written or printed with the beer purchased, to the effect that the same is a mixture."

They took the laudable step of sending the resolution to other County Councils to secure their support, and amongst others it went to the Hertfordshire County Council, the majority of whose members appear to be as thick-headed a gang of ignoramuses as ever cursed a county administration by their misrule. The rascals who concoct "swipes," and sell it as beer, must feel thankful that authorities exist to perpetrate folly of this character. At the last meeting of this Council, Councillor Baron Dimsdale proposed, and Councillor Abel Smith seconded a resolution similar to that of the Bedfordshire County Council given above. The Vice-Chairman proposed as an amendment, which was seconded, that the next business be proceeded with. The amendment was carried by a majority of 15 to 13. After this sample of unpatriotic blindness to English agricultural interests, our readers will not be surprised to learn that in the County Jurisdiction of Hertford, for a population of 207,230, the last Local Government Board report states that only 12 samples of butter were taken for analysis, only 3 samples of lard, and none whatever of beer and numerous other articles. Truly Hertfordshire affords a spectacle of fools, who moan and grumble at the depression in agriculture and the ruin that is overtaking one English industry after another, and yet will not take the small trouble to even pass a resolution assisting a movement to suppress frauds in beer, or to enforce Acts that would give English dairy-farmers fair play. English farmers want protection, and that badly, but it is protection from the idleness and ignorance of asses like these who overstock the Hertfordshire County Council. The Lindsey County Council, according to the last Local Government Board report, only took 3 samples of milk, no samples of butter, and none of beer for the year, but it took 28 of spirits. At their last meeting the pure beer resolution of the Bedfordshire County Council was, on the motion of Mr. Haxby, unanimously agreed to by the Lindsey County Council, which seems to show that this local authority is beginning to see how great would be the benefit to English agriculture were there to be more vigorous enforcement of the Adulteration Acts. As a genuine specimen of absence of even the most elementary notions of how to enforce the Adulteration Acts, and give English producers a fair field against foreign free fraud, West Suffolk, however, is far in advance of any authority we have lately come across. On July 31st a meeting of the West Suffolk Standing Joint Committee was held in the Shirehall, at Bury St. Edmund's. In the absence of Sir Thomas Thornhill, Bart., Col. Barnardiston presided. The Local Government Board gave the lazy County Council a sound rating, saying in a special letter to the West Suffolk County Council that it observed with regret that during the last two years no sample had been submitted to the Analyst under the Food and Drugs Act.

The discussion on the Local Government Board's letter was so rich in pure unadulterated idiocy that we give it as it appeared in the *East Anglian Daily Times*, August 1st:—

"The Chairman remarked that some time ago instructions had been given that Superintendents of Police were to carry out the provisions of the Act; but it was understood only in such cases as where samples were brought to them. They would act now and then, as samples were submitted by individuals. Mr. Bell enquired if it was not the duty of the County Council to put the Act in force? He thought the police ought not to be saddled with extra duty without remuneration. The Deputy Chief Constable was not aware the police had been empowered to spend any money in the matter. Mr. Jaggard suggested whether it was not advisable some monetary inducement should be offered to the police, with a view of ensuring the Act being carried into effect. The Chairman was adverse to offering premiums

for convictions. The Marquis of Bristol moved a resolution in favour of the attention of the Chief Constable being directed from time to time to obtain samples for purposes of analysis. Mr. O. D. Johnson, in seconding, spoke of the advisability of dairy produce being subjected to analysis. It was understood that the terms of the resolution were unanimously agreed to, the Rev. J. White having suggested that the Chief Constable be communicated with as to what remuneration (if any) should be awarded to the police for performing the additional duty imposed upon them."

Anything more ridiculous than the above it would be hard to find outside the region of comic opera. Apart altogether from the fact, that the police are by the very nature of their work the very worst possible persons to put the Acts into force, inasmuch as they are known to all shopkeepers who, naturally enough, would take care that whatever adulterated goods ordinary customers got the police would get none, the fatuity that is able to seriously picture samples of adulterated goods being "brought to the police" is amazing. Imagine the probability of a grocer who is selling fivepenny margarine as shilling butter, taking a sample from himself, dividing and sealing it, and, inflamed by a rigorous sense of duty, taking himself to the nearest police inspector to have his sample analysed and himself summoned! We believe the police inspector would be more likely to incontinently march him away to the place where apparently it would be a considerable public benefit if some of these fearful and wonderful County Councillors were deposited for a time—the County Asylum. And yet it is not the maddening want of common sense thus exhibited that we care to dwell on, we picture it solely to give our readers an object lesson as to how miserably imperfect and incapable of really sensible Local Government are too many of our County Councils, Town Councils, Vestries and Local Boards. There are, in so far as the Sale of Food and Drugs Acts are concerned, happily and well for English agriculture, some oases in the desert of idleness, ignorance and, too often, actual connivance at roguery that constitutes the bulk of the local authorities in the United Kingdom. The stultification of the Food and Drugs Acts has been not only a scandal, but has directly encouraged and fostered fraud by foreigners that plunders the public of millions of pounds yearly. Some county authorities, such as Durham, have special Food and Drugs Acts Inspectors thoroughly conversant with the Acts and procedure, and able to conduct prosecutions. The West Riding of Yorkshire, and numerous public bodies throughout England, Scotland and Ireland, have special officers to enforce the Sale of Food and Drugs Acts. Seeing that the non-enforcement of these Acts in so great a part of the United Kingdom means the loss of millions of money yearly to English agriculture, and the practical fostering of the free fraud now practised with impunity by Hamburg, Dutch and other butter-blending and margarine rascally thieves and American steamed lard swindlers, we find it hard to have any feelings other than hearty contempt for the *miserables* of landowners who whine and moan and beseech Parliament for this advantage and that protection, and yet refuse to even trouble themselves to understand or enforce existing Acts that would suppress fraud, and directly benefit agriculture. The expenditure of a few hundreds of pounds per year in Food and Drugs Acts Inspectors' salaries by each County Council would benefit agriculture more than all the blatherumskite of the Chaplins, Gardners or Pagets, which, up to now, has been merely talk, and is never likely to be anything else.

Berkshire County Council affords another example, nearly as irritating as that of West Suffolk. At the last quarterly meeting of this County Council, a letter from the Local Government Board, dated May 13, was also read calling the attention of the County Council to the fact that the number of samples submitted for analysis under the Food and Drugs Acts, in the County of Berks, was quite insignificant in proportion to the population of the County, and to the importance of carrying out these Acts effectually.

We are glad to see that the Local Government Board are hammering away at the "Berkshire" County Council, but they have certainly to deal with very refractory material, for, judging by the Chairman's remarks in reference to that letter, to the effect that he understood that the Chief Constable sent samples for analysis, "but the difficulty was to get convictions," the Chairman, one of our legislators, Mr. W. G. Mount, M.P., J.P., is utterly ignorant of the working of the Acts. The complaint of the Local Government Board is merely that the Chief Constable sends a quite insignificant number of samples for analysis; but the Chief Constable acts under the orders of the County Council. He cannot send a single sample without their orders, and convictions cannot be obtained if a fair number of samples are not taken, inasmuch as every sample is not adulterated. Can nothing open the eyes of County Councils who neglect their duties in this most shameful manner? In France the names of fraudulent traders are advertised in the public press. In China their ears are nailed to the gallows. It would perhaps be well if a few members of County Councils were treated in this manner.

ANNOTATIONS.

A WARNING TO LARD REFINERS.

FROM THE RETAILER TO THE WHOLESALE DEALER
AND THENCE TO THE ACTUAL OFFENDER.

Our exposures of the "Warranty" dodge, and the methods by which American and other manufacturers defeat the Adulteration Acts are justified—this time in Sunderland—where the ability and energy of Mr. B. Scott-Elder, Chief Inspector of Food and Drugs for the County of Durham, has successfully broken through the barriers reared by the American stearine-lard ring, and behind which they have so long and with brazen impunity plundered the public, and competed unfairly against English and Irish lard refiners. If anything could open the eyes of Cameron, M.P., and those wretched M.P.s who support his Bill, this case surely ought to do it. The action came on for hearing before the Sunderland Bench on the 26th July, when Edward Duerden, provision merchant, Liverpool, was summoned by the Durham County Authorities, for giving a false warranty. Mr. L. S. Iliff prosecuted for the County Authorities, and Mr. Duerden pleaded guilty. Mr. Iliff gave a *resumé* of the case, which he said was originally brought by one of the County Inspectors under the Food and Drugs Act, the prosecution being against a grocer at Consett, who was charged with selling lard adulterated with about 15 per cent. of stearine. The grocer produced a "warranty" as his defence, and said that he got the lard from Messrs. Pearman and Corder, of Sunderland, who gave the warranty to its purity. The Inspector thereupon considered the proper course to be to take proceedings against the Sunderland firm, but they, it appeared, had in their turn a "warranty," having purchased the article from Duerden, in Liverpool, and got a warranty from him at the same time, and sold the lard to the Consett grocer without alteration. It was this "no thoroughfare" that Mr. Scott-Elder determined to open, and the Durham authorities are to be congratulated on the result. It is the first instance in which a summons against the "retailer" has been allowed to lie in abeyance, and where the intermediate "wholesale" dealer has been passed over and the real offender punished. Duerden pleaded guilty, and was prepared to give an undertaking to withdraw the whole of the adulterated lard which had been sold, and not to continue to adulterate the lard with stearine, and to pay the costs of the prosecution. Mr. Crow, on behalf of the defendant, gave the usual bunkum that "the lard was adulterated for the purpose of stiffening, without which the housewives of England would not purchase it." The Defendant himself, said Mr. Crow, got a warranty as to the lard from somebody in America. They could not of course go to America. His client had called in about 170 tons of the lard, and had paid the carriage on it, which meant a loss of £500 or £600 to him. He was willing to give the undertaking mentioned by Mr. Iliff, and to do the best he could to get all the lard in, but it would be understood that it would take six or eight weeks to do so. The Bench, after consultation, imposed a fine of £5 and costs.

CONDENSED MILK.

A WARNING TO GROCERS.

Statements are being made that grocers may sell the *spurious separated condensed milks* labelled as they at present are without risk of prosecution, and that the decision *Davis v. Jones*, entitles the vendors of such milks to falsely label them *skimmed condensed milks*. Whilst there are one or two skimmed brands, to which no exception can be taken, the disclosure of the skimmed contents being properly made, our readers would be unwise to run the risk of selling such milks. The decision by Mr. Littler, Q.C., at Westminster Guildhall, has not yet been set aside, and as it would be an insult to Mr. Littler's legal qualifications to compare them with those of the brace of judicial curiosities who decided the case of *Davis v. Jones*, the Middlesex County Council have decided to stand by Mr. Littler's decision, and will carry on the stated case with a view to upsetting the astounding and unwarranted decision of Justices Day and Lawrence.

LIMERICK AND THE FOOD AND DRUGS ACT.

At a meeting of the Limerick Corporation on July 24th, a deputation, consisting of Messrs. W. H. Swain, W. L. Stokes, Thomas O'Brien, and Thomas Hickie, representing the Butter Merchants' Association, appeared before the meeting for the purpose of urging the appointment of a member of the Royal Irish Constabulary as Inspector to the City under the Food and Drugs Act. Mr. Stokes pointed out that the Corporation had perfect power to make the appointment as the Sanitary Authority. A resolution was passed asking the County Inspector to select a constable for the purpose.

THE BRITISH INSTITUTE OF PUBLIC HEALTH AND
FOOD ADULTERATION.

At the annual congress held at Edinburgh last week, Dr. Mansfield Robinson, Clerk to the Vestry of Shoreditch, London, read a paper on "The Sale of Foods and Drugs Act," in which he pointed out a number of defects which in his opinion existed in the present law, and which had crept into the administration of the law. He spoke of the Bill on the subject introduced into Parliament this session by Sir Charles Cameron, M.P., as a measure having for its aim to make the Foods and Drugs Act a dead letter—as a covert attempt to protect dealers in provisions at the expense of the public health; while on the other hand he alluded to what he considered a number of good points in the Bill introduced by Mr. Plunkett. In his opinion, the following amendments were required on the present law:—The fixing of the minimum penalty, and the increasing of the penalty after the first offence; provisions which would enable the innocent retailer to bring before the Court the guilty wholesale dealer or other person causing the adulteration; that antiseptics, cosmetics, and preparations for cooking should come under the scope of the Act, and that the labels setting forth the amount of adulteration in the article should be clearly printed. On the motion of Dr. Allan, Medical Officer of Health for the Strand district of London, a resolution was adopted declaring that, in the opinion of the Institute, a Parliamentary inquiry into the working of the Foods and Drugs Adulteration Act was requisite.

A SANITARY INSPECTORS' ASSOCIATION FOR
NOTTINGHAM.

A meeting of Sanitary Inspectors was held at the Exchange, Nottingham, on July 29th, for the purpose of forming an Association with the object of raising the status of Sanitary Inspectors, the dissemination of sanitary knowledge among the members and the general public, and the rendering of practical assistance and encouragement to those holding appointments as Sanitary Inspectors, and who have not yet obtained the qualifications necessary to become members or associates. Mr. T. R. Swaine was elected to the chair, and there were also present:—Messrs. W. C. Betts, G. W. Hawley, R. C. Cordon, J. E. Holmes, George Allsop, W. Flint, C. F. Brearley, D. Bowler, C. Parnham, R. Whitbread, G. F. Williams, J. Golding, C. Copley, F. Smith, and G. B. Willbond, Associate Sanitary Institute, Hon. Sec., *pro tem*. After discussion it was decided to form an Association, and that its title should be, "The Nottingham and District Sanitary Inspectors' Association." Dr. Boobyer was elected President for the ensuing year, with Dr. Scott Tew as Vice-President, Mr. G. B. Willbond as Hon. Secretary, and Mr. Flint as Treasurer. A Committee was formed, with instructions to draw up rules, and make other necessary arrangements.

MEAT PROSECUTION.

POISONOUS MEAT.

Robert Eavis, a farmer of Beechinstoke, near Pewsey, Wilts, was summoned before Mr. Alderman Green, at the Guildhall, London, on July 24th, for sending to the Central Meat Market four quarters of beef which were diseased and totally unfit for human food. Mr. Vickery prosecuted on behalf of the Commissioners of Sewers, and Mr. Ricketts defended. Dr. Saunders, medical officer of health for the City, deposed that the animal from which the beef was taken had been suffering from such a peculiar form of tubercular disease that he had sent a piece of the meat to Dr. Turner. Dr. Turner (lecturer on hygiene at Guy's Hospital) said that he had examined some fibrous tissue; he had also subjected it to microscopic investigation. The eating of such meat would be attended with the greatest danger. Mr. Ricketts said the defendant had fallen into an error which any man might have fallen into. He was a farmer, boasting of possessing the finest herd of cattle in the county of Wiltshire, and, therefore, for his own protection, he would not be likely to allow a diseased cow to graze with others. It had been a very dry season, and farmers thinned their stock. This, an old animal, was given over to the butcher to do what he liked with. He knew actually nothing more about it. All that he did know was that it was thin, and not likely to make flesh. The condition of the lungs should have been pointed out to the defendant; this however the butcher had failed to do. The defendant was called, and said he farmed 500 acres. He had to reduce his stock of cattle, and called the butcher to take one away. He had no idea anything was the matter with the lungs. He would sooner have thrown it away than it should have been sent to London in such a condition. The carman was called, and said he did not know anything was the matter with it. A gentleman who had known the defendant for 20 years gave him an irreproachable character. The Alderman said guilty knowledge was not necessary to constitute an offence. Had that been proved, he should have sent the defendant to prison. As it was he should impose a fine of £25 and six guineas costs.

WATER IN BUTTER.

At Ennis, on July 21st, Pat MacMahon, of Boloughera, Lissycasey, was fined at the suit of Sergeant McHugh, 5s. and costs of Court, for having butter for sale in Ennis market, containing 17.72 per cent. of water. The Bench announced that in these cases heavy fines would be put on in future.

ANALYSTS' REPORTS.

COUNTY OF DURHAM.

The report of Mr. W. F. Keating Stock, F.I.C., Public Analyst to the Durham County Council says:—

1. I have the honour to report that under the authority of the County Council, I have during the past three months analysed 186 samples of Food and Drugs. Of these 128 have been collected by the three county Inspectors in the following proportions respectively, namely:—Chief Inspector Elder, 46 samples; Inspector Dunn, 40 samples; and Inspector Laidlaw, 42 samples. Of the remaining 58 samples, 47 were sent in by the Inspectors for the borough of Jarrow-upon-Tyne, and 11 by the Inspector for the Hebburn Local Board of Health.

2. The number of samples returned as adulterated is 32. The total percentage adulteration for the quarter is 17.20, as against 17.68 for the quarter ending December 31st, 1892. Practically, therefore, the rate of adulteration in the county has remained constant for half a year, and it is a matter of considerable regret to me to have to draw attention to the fact that this rate is 5 per cent. higher than the average rate over the United Kingdom as set forth in the Local Government Board's Returns for 1891-2.

3. The table accompanying the schedule shows that the adulteration this quarter is spread over the following articles, viz.:—Spirits, coffee, oatmeal, butter, cheese, lard, drugs, and arrowroot.

4. SPIRITS.—47 samples have been analysed, and of these 9 were found to contain "water added in excess of the legal limit." The adulteration is, therefore, not quite 20 per cent. instead of the 33 per cent., which has, though varied occasionally by higher figures, again and again appeared in my reports until it seemed hopeless to expect any improvement.

5. COFFEE.—6 samples have been analysed. 1 was found to be adulterated. It contained 57 per cent. of chicory.

6. OATMEAL (Flour and Meal).—5 samples have been analysed, of which 1, an oatmeal, contained 20 per cent. of barley meal. During the hearing of the case the ingenuity of the defence was taxed to a remarkable degree to prove the absolute impossibility of the admixture. I am pleased to say that the bench saw the matter in its proper light, and inflicted a penalty of twenty shillings.

7. BUTTER.—20 samples have been analysed, and 4 of these were adulterated, or, perhaps it would be more correct to say that 2 of the 4 were unsophisticated margarine, whilst the other 2 contained 50 and 75 per cent. of margarine respectively. In one of the latter cases the sample was purchased at a large butter and margarine emporium, and the justices hearing the case expressed their sense of the fraud by inflicting the maximum penalty of £20 and costs.

8. CHEESE.—17 samples have been analysed, 1 of which was found to contain foreign fat to the extent of 20 per cent.

9. LARD.—22 samples have been analysed, and 12 of these have been found to contain a substance known in the trade as beef stearine, which is essentially beef fat from which the more oily portion has been extracted by treatment under pressure. Numerous prosecutions have been instituted upon the strength of my certificates, and in two cases I have been called to support these certificates by sworn testimony. I feel bound to say that upon these occasions I had to listen to what was in part absolutely untrue and entirely absurd. Being a witness only, and not an advocate, I was helpless in the matter, but I propose now to remedy the condition of things and remove false impressions. I need not favour the council with a treatise upon the manufacture of lard. I think it will be sufficient to say that at present lard is dearer than it has been for several years. There is, roughly, a difference of twenty shillings per ton between the price of lard and the price of pressed beef fat, lard being the dearer. It is said that beef fat is necessary to the transport condition of lard. I admit at once that the addition of beef fat to lard does make it firmer, because the melting point of pressed beef fat is higher than the melting point of ordinary commercial lard. But I have to remind the council that in 1889 it was my duty to say in my reports that cotton seed oil, a substance which is liquid at ordinary temperatures, had been found in lard to the extent of even 20 and 30 per cent. Keeping this fact in view, what becomes of the necessity for "stiffening" lard at the present time? I say, without fear of truthful contradiction, that it is the desire for profit only that "necessitates" the addition of beef fat to lard, and that such addition is intended fraudulently to increase the bulk or weight of the article, and that therefore such addition is distinctly a contravention of the Food and Drugs Act.

10. DRUGS.—8 samples have been analysed, and of these 3 were not of the nature, substance and quality demanded. Of these 2 were samples of a popular and very valuable medicine known as tincture of rhubarb. In each case I made very generous allowances for all possible trade contingencies, and yet found that in one case the sample contained 25 per cent. less extracted matter than ought to have been present; and in the other the sample had been diluted with at least one-fifth of its bulk of water. The third case was that of a compound tincture of camphor, commonly known as paregoric elixir. This article, when genuine, contains opium, and under the Pharmacy Acts can only be sold by a qualified chemist. The sample in question was bought at a "Store," and was a worthless imitation of the true tincture.

11. ARROWROOT.—3 samples have been analysed, and one of these proved to be a mixture of two-thirds cornflour and one-third genuine arrowroot. I believe I am correctly informed that cornflour is about one-fourth of the price of good arrowroot. Arrowroot is generally viewed as a sick-room necessity, and up to this time, though I have analysed some scores of samples, I have always found this article genuine. It now appears that even the sick and the suffering must

pay tribute on their medicines and diet to the greed of the adulterator.

12.—A redeeming feature of this report is the absence of adulterated milk. Out of 36 samples taken in various parts of the county, not one has fallen below the adopted standard of quality. This fact alone represents a benefit to the community which is not to be reckoned in figures.

TO THE GRAND JURY OF THE COUNTY FERMANAGH.

Mr. Foreman and Gentlemen,—I beg leave to report that I have made the following analyses since the 1st January, 1893:—For the Guardians of the Enniskillen Union—Two specimens of water were analysed. One was a good water; the other was a bad one. For the Guardians of Irvinestown Union—Four specimens of water were analysed. Three were free from sewerage pollution, but were somewhat hard for washing purposes. Sergeant P. Hannon, R.I.C., Derrygonnelly, sent seven specimens of butter and six samples of milk; none of the milks were adulterated; with respect to the butter six were pure and one was adulterated with 20 per cent. of margarine. Sergeant M'Keen, R.I.C., Lack, sent five samples of whisky and three of bread. They were all pure. Sergeant M'Naughton, R.I.C., Lisnaskea, sent two specimens of milk. Neither were adulterated, but both were of very poor quality. A specimen of whisky was analysed for Sergeant Wm. Cassidy, R.I.C., Enniskillen, and found to be adulterated. I received from time to time from Sergeant Sheridan, R.I.C., Enniskillen, 20 samples of milk, six of butter, four of whisky, and two of flour; of the milk samples nine were adulterated with 10, 12, 15, 15, 19, 20, 20, 20, and 40 per cent. of water respectively, two of the butter specimens were adulterated with 20 per cent. of fats foreign to butter, no doubt what are sold as "Margarine." None of the whisky specimens were adulterated. Sergeant Cassidy, Enniskillen, sent a specimen of whisky which proved to be adulterated. Total analysis made in the half year, 62; number of food specimens adulterated, 12. Sergeant Sheridan has, as usual, been particularly active in carrying on the provisions of the Sale of Food and Drugs Act. List of convictions obtained by Sergt. R. Sheridan under Food and Drugs Act since 1st March, 1893:—1. Francis Loughram, Dowra, refusing to sell butter for analysis. Fined £1 ls. and 1s. costs. Date of conviction, 27th March, 1893. 2. Thomas Kennedy, Head-street, Enniskillen, selling adulterated butter. Fined £1 and 1s. costs. Date of conviction, 17th April, 1893. 3. Michael Boland, Rossorry, Enniskillen, selling adulterated milk. Fined £2 and 1s. costs. Date of conviction, 24th April, 1893. 4. Francis Doherty, Henry-street, Enniskillen, selling adulterated buttermilk. Fined £2 and 1s. costs. Date of conviction, 24th April, 1893. 5. Geo. Millar, Ashwoods, Enniskillen, selling adulterated buttermilk. Fined £3 and 1s. costs. Date of conviction 24th April, 1893. 6. Wm. Dundas, Cleens, Enniskillen, selling adulterated buttermilk. Fined £3 and 1s. costs. Date of conviction, 24th April, 1893. 7. Susan M'Manus, Mill-street, Enniskillen, selling adulterated butter. Fined £4 and 1s. costs. Date of conviction, 24th April, 1893. 8. Geo. Breen, Strand-street, Enniskillen, selling adulterated milk. Fined £1 and 1s. costs. Date of conviction, 15th May, 1893. 9. John Millar, Market-street, Enniskillen, selling adulterated buttermilk. Fined £2 and 1s. costs. Date of conviction, 15th May, 1893. 10. Jas. Johnston, Down-street, Enniskillen, selling adulterated buttermilk. Fined £2 and 1s. costs. Date of conviction, 12th June, 1893. 11. Adelaide Hinchy, Orchard-terrace, Enniskillen, selling adulterated buttermilk. Fined £1 and 1s. costs. Date of conviction, 12th June, 1893. Total fines and costs, £22 12s. This money has, I understand, been lodged to the credit of the county. There are other prosecutions pending. 29th March—Two cows were examined for poison for Dr. L. Kidd, Carlton House, Enniskillen. The result was negative.—I am, gentlemen, your obedient servant, CHARLES A. CAMERON, Public Analyst for the County of Fermanagh.

City Laboratory, 17, Castle-street, Dublin, June 28th, 1893.

FOOD AND DRUGS ACT WORK IN COUNTY CAVAN.

According to the report of Sir Charles A. Cameron, Public Analyst for the County Cavan, read to the Grand Jury at their meeting for fiscal business on 8th inst., he received and analysed the following articles, which were forwarded to him for that purpose by the various Food and Drug Inspectors in the County during the half-year ended 30th June, 1893:—Whisky, 34 samples, of which 8 were adulterated; milk 15, of which 9 were adulterated; tea 9, pepper 6, mustard 4, bread 3, corn flour 1, flour 4, arrowroot 1, sago 1, cocoa 1, butter 2, all of which were pure; coffee, 3 samples, 1 of which was adulterated. Twenty-one more articles were also received, and are under examination at present. It will be seen that 22½ per cent. of the samples were adulterated. Some of the whisky samples were reduced to 41 under proof, but most of them were about 30 to 35 under proof. Milk was adulterated gradually up to 60 per cent. of added water. Samples of water from Cavan, Bailieboro', and Old-castle Unions, were also analysed, some of which were polluted and unfit for use. The Analyst had his son appointed as his assistant by the Grand Jury, but they refused to increase his salary, which it appears is only £25 yearly.

NORTHAMPTONSHIRE COUNTY COUNCIL.

Mr. Samuel Clowes, in his annual report under the Food and Drugs Act for the Northern Division, stated that 41 samples had been procured in his district during the past year, and that two prosecutions had been instituted under the Food and Drugs Act, and three under the Margarine Act, a conviction being obtained in each case. Mr. Mattinson reported for the Southern Division that 43 samples had been purchased, of which two whiskies, one butter, one milk, and one coffee were adulterated.

POISONOUS COLOURING IN JAMS AND OTHER FOODS.

REVELATIONS AT SWANSEA.—ARSENIC IN GLYCERINE.

In our issue of October 8th, 1892, we directed public attention to the increasing use of artificial colouring in food stuffs. One after another abominations, some of them of the most deadly character, have been introduced into foods by manufacturers who have not the slightest knowledge of their properties or the dangers attending the use of the chemicals they employ with such light-hearted disregard of the consequences to the unfortunate consumer. We do not refer so much to the most commonly used of these colouring agents—annato in butter—it being harmless enough, but when the purveyor of rotten flesh in the form of sausages, potted meats, brawns, &c., not content with endangering the health of the consumer by his villainous practices employs aniline colours to give his wares a fresh and appetising appearance; when the sugar confectionery, which the doting parent purchases for his cherished children, is found to be hardly ever without these deadly dyes, then it is high time our Government did what has been done by almost every civilised country in Europe—stepped in and regulated a practice so fraught with danger to the public. It is, of course, alleged that the minute quantities of these colours used is such that in a given portion of food they are harmless, and that many of them are non-poisonous, but that is beside the question—they are not necessary in the preparation of food stuffs, they are used indiscriminately by butchers, jam makers, confectionery manufacturers, who possess no scientific knowledge of their properties, and what is a still further cause for objection, by their aid the rotten is made to look like the fresh meat, the watered milk is given a beautiful creamy appearance, and substances may, by the unchecked use of these poisonous colouring agents, be introduced into the system that in poisoning cases may lead to grave miscarriages of justice. Public Analysts know that many colours commonly used in food preparations, such as picric acid and its salts, Martius' yellow, safranin, methylen blue, dinitro cresol, aurantia are positively poisonous, and why our Government has been so careless as to allow the unchecked use of whatever poisonous colourings any ignorant person chooses to avail himself of in foods is a mystery. The Food and Drugs Act, clause 6, says:—"Nothing shall be added to any article of food or drug unless the added substance is required for the production or preparation thereof as an article of commerce." The following case of the use of coal tar dyes in jam is therefore one that directly concerns the public welfare. As far as we know, it is the first case that has been brought before the Courts, and in the face of the clause above quoted, we must confess our inability to understand why the Swansea Stipendiary and his colleague, Mr. Parminter, allowed a legal quibble to prevent so important a question being thoroughly threshed out in public. To give the percentages of the coal tar dye in so small a sample as is usually supplied to a Public Analyst, is obviously very difficult, if not impossible, and the Act, neither in the spirit nor the letter, warrants such a construction as that placed upon it at Swansea. The jam in question was sold in stoneware pots, so that the purchaser could not see the colouring matter. As to the merits of the case itself, our readers can form their own opinions:—

It was brought under Section 6 of the Food and Drugs Act, and was heard at the Swansea Police-court on the 27th July, before Messrs. J. C. Fowler (Stipendiary) and J. C. Vye-Parminter, Maria King, 13, Catherine-street, Swansea, was summoned for selling adulterated jam on June 27th. The full text of the charge was that the defendant did sell to one James Barnett, to the prejudice of the said James Barnett, the prosecutor, a certain article of food, to wit, raspberry jam, which was not of the substance, nature, or quality of the article demanded by the purchaser, that is to say, that the said jam was artificially coloured with one of the coal-tar dyes." Mr. Millar, Deputy Town Clerk, prosecuted, and Mr. Villiers Meager (instructed by Mr. Lloyd Owen) defended. With the prosecution were Dr. W. Morgan, the Borough Analyst, and Dr. Ebenezer Davies, the Medical Officer of Health for the Swansea Borough.

Mr. Millar, in opening the case, said that Sergeant Barnett, one of the Analyst's Inspectors, visited the defendant's shop on June 27th, and asked for a pound pot of raspberry jam. He was supplied, and upon analysis the Borough Analyst certified it to have been coloured with an aniline dye. Jam, in the ordinary way, was fruit and sugar. That, when prepared by boiling, was all that was necessary for ordinary jam. The question was, why was this colouring matter added? The supposition was that it was added to hide an inferior article. The jam was one of the ordinary jams sold in pots which are never opened by the seller. It was sold in a white earthenware pot, sealed with a parchment cover, and bore the label of the manufacturers, a Worcester firm. Proceedings were taken against the shopkeeper

because it was the only mode of procedure under the Act, and it was alleged that the defendant sold the jam otherwise than as what it was delivered to her from the manufacturers. Sergt. Barnett, having proved the sale, the notice given defendant at the time that the jam was intended for analysis, and the division into three parts as prescribed, produced a certificate of Dr. Morgan, the Borough Analyst, which read as follows.—"The above jam was artificially coloured with one of the coal tar dyes, and I am of opinion that the use of such colouring matter is highly objectionable and prejudicial to health." Mr. Meager at this point took exception to the Analyst's certificate, on the ground that it did not fulfil the requirements of the Act, which laid down that the specific particulars of the article examined must be given, and that the percentage of foreign ingredients must be stated. After a long discussion, and consideration by the Bench, the learned Stipendiary ruled the objection fatal to the prosecution. The certificate did not state the particulars of the article nor the percentage of foreign ingredients, and it was imperative that all such matters should be brought before the Court. He therefore dismissed the case, with the intimation that new proceedings may be taken if desirable. Mr. Meager applied for costs, remarking that he was not given the opportunity of fighting fairly, inasmuch as these particulars, which it was necessary the defence should know before the case was tried, had not been available. Mr. Miller: The opportunity was open; you need not have taken this objection. The analysis was there for you, and further particulars were never asked for. Mr. Meager said that amongst the witnesses were an expert, Dr. Sweet, and a gentleman to prove the process of manufacture of the jam. An expert was expensive, and he asked that the larger costs be allowed. If the defendant had been convicted, the defence would have had, similarly, to pay all the costs. The Bench decided to allow no more than the usual witness fees and expenses, and advocate's fees.

Last year in the height of the terrible cholera epidemic at Hamburg, a cargo of fruit from that port was brought to Harwich, and a great portion of it sent straight away to one of the large cheap jam makers in the most crowded part of the East End of London. A fruiterer at March, in Cambridgeshire, who purchased a part of the same consignment, was seized with cholera and died. The amount of fruit and pickling material rejected by firms of repute like Crosse and Blackwell, that is purchased by inferior jam makers in London would surprise any save those who watch the markets, and it is intolerable that, in addition to the use of unsound fruit, etc., substances which medical men everywhere condemn as dangerous and hurtful should be, unknown to the consumer, put into food stuffs. On this point the *British Medical Journal* recently spoke out very strongly, stating that "we require a more precise and workable standard for colouring matters than the Sale of Food and Drugs Act contains, and that certain colouring ingredients should be specifically prohibited." The unsuspected presence of poisons in many preparations which the public regard as perfectly non-poisonous, came out strikingly in some experiments made by L. Siebold, and given by him at the Pharmaceutical Conference at Newcastle in 1889. He tested colourless and odourless samples of glycerine sold for toilet and pharmaceutical purposes, with the results that the majority of the samples tested were found to contain arsenious acid, varying in proportion from 1 part in 4,000 parts to 1 part in 6,000. A few samples exceeded that proportion, and one contained as much as 1 part in 2,500.

These practices may well lead us to ask, if in some of the most noted poisoning cases there is not room for grave suspicion that there have been miscarriages of justice? The Maybrick case comes as one in point. One-eighth of a grain of arsenic was discovered in the analysis, but two vitally important points, strangely enough, never suggested themselves to the scientific or legal experts. One was that Maybrick himself was an arsenic eater, and the other that he used glycerine, and that at the very time of the trial Analysts found that the majority of glycerines sold for pharmaceutical and toilet purposes contained arsenic. For example, one-eighth of a grain of arsenic was found in Maybrick. Siebold's experiments with commercial glycerine, given above, showed that 300 grains of the worst sample of glycerine that he analysed contained as much arsenic as was found in the Maybrick analysis, i.e., less than $\frac{1}{4}$ of an ounce of glycerine given to James Maybrick would account for the poison present. This astounding omission of the counsel and the scientists concerned in the case may be accounted for by the facts that, save to a few Analysts who were regularly analysing glycerine, the arsenic impurity was unknown, as it was also to the *British Pharmacopoeia*, in which no tests are given for arsenic in glycerine. The whole question of the presence of poisons in substances used for food and medicinal purposes is therefore one of real importance and for the public protection as well as to avoid miscarriages of justice that may doom possibly innocent persons to the gallows, or to life-long imprisonment, it is to be hoped that the Swansea case will not be allowed to rest in its present unsatisfactory position. If the dye be a non-poisonous one, that much at least should be made fully clear.

BUTTER MIXTURES.

At Ennis Petty Sessions, on July 21st, Mr. James Kidd, Church-street, was prosecuted by Sergt. John McHugh, Inspector under the Food and Drugs' Act, for having on the 20th May exposed for sale, by retail, a parcel of margarine, on which no label marked "margarine" was attached, contrary to the Margarine Act of '87, sec. 6. Mr. P. S. Connolly, solicitor, Limerick, appeared to prosecute on behalf of the South of Ireland Butter Merchants' Association. The defendant was not professionally represented, his foreman, Mr. Crowe, appearing in answer to the charge. Mr. Connolly in opening the case, said it was brought under a different Act to the Food and Drugs' Act. It was instituted under an Act passed in the year 1887, the 50 and 51st Vic., which was an Act for the better prevention of the fraudulent sale of margarine. Now, under the third section of that Act, "the word butter shall mean the substance known as butter, made exclusively from milk or cream or both, with or without salt or other preservative, and with or without the addition of colouring matter; and the word margarine shall mean a substance whether compound or otherwise prepared in imitation of butter, and whether mixed with butter or not, and no such substance shall be allowed to be sold except under the name of margarine, and under the conditions set forth in the Act." Their experience in the matter was very large, and it was found that butter had been mixed with margarine in the proportion of 75 per cent., and sometimes 50 per cent., and that the article was sent in to market at least 25 per cent. under the value of ordinary butter. Of course, the variation in the different adulteration was according to the knowledge and abilities of the different parties concerned. Here was the analysis of Sir Charles Cameron—"This is butter adulterated with at least 75 per cent. of fats foreign to butter." So that in this article there was only 25 per cent. of butter and 75 per cent. of margarine, and taking a pound of butter to be worth a shilling and margarine to be worth sixpence, the value of this article would be about 7d., in place of the ordinary price of butter. This state of things caused, in the '87 Parliament, this Act to be brought in. There was a very important section, the sixth in the Act, which required every person dealing with margarine, to display a printed label describing it as such, and if the defendant had done this, and placed in the keg in which the article sent for analysis to Dr. Cameron [was, the printed letters according to this section of the Act, no offence would lie, and it was in the fact of the defendant not thus describing the nature of the article that an offence was committed under this Act of Parliament. The section was as follows:—"Every person dealing with margarine in the manner described in the preceding section shall conform to the following regulations—"On every package, whether opened or closed, and containing margarine, shall be printed, or durably marked "Margarine" on the top, bottom, and sides, in printed capital letters of not less than three-quarters of an inch square, and if any of such margarine be exposed for sale by retail, there shall be attached to such parcel thereof, so exposed, and in such manner as to be clearly visible to the purchaser, a label marked in printed capital letters not less than one and a half inches square, "Margarine," etc., etc. Continuing, Mr. Connolly said any person not having the article properly marked so that the public could see it, was liable to a penalty of not less than £10 under this Act. Evidence was then called, and Sergeant McHugh proved the purchase of the article, and the receipt of the analysis from Sir Charles Cameron. There was no label on the article, except the figures "10" representing the price. Mr. Crowe, for the defence, said they used always to keep margarine labelled, but on this particular occasion, the quantity of the article was so small that there was in reality no room for the label on it. There was no intention whatever of deceiving the public. Witness here handed up specimens of the margarine labels used in his establishment. Mr. Connolly: That defence is absurd. He is bound to have it labelled on the top, bottom and sides of the package. Witness: It was labelled previously that morning, but when it was sold down to about an inch, the label had fallen off. The Chairman: We cannot impose a less fine than 40s. and 20s. costs. Mr. Connolly: In the last case of this sort in Dublin they felt so strongly that when it came before the Court, on the 16th, the defendant, a man named Joseph Kenny, was fined £10.

REFUSING TO GIVE A SAMPLE OF BUTTTR.

The appeal case in which Timothy McGrath was defendant, and which was sent back by the Queen's Bench to the Magistrates for rehearing, as their decision was reversed by the Superior Courts was heard on the 21st at Ennis. The Chairman, Mr. Hodder, R.M., suggested that in the absence of defendant he would inflict a small fine. The defendant was fined 1d. and costs of Court.

The above is the case where the farmer refused to sell a sample out of his firkin in the Ennis Butter Market, on 26th April, 1893. The case was dismissed without prejudice at hearing at Ennis Petty Sessions on 26th May, 1893, and decision reversed by Queen's Bench on appeal, stating that 17th section Food and Drugs applied to wholesale as well as retail.

At Dublin, on July 27th, a fine of £3 was inflicted on a Miss Collins, residing at Nicholas-street, for failing to properly label some margarine which she had exposed for sale. Miss Collins said that the packet which had been exposed was so small that it would not hold a label.

At Dublin, on July 26th, Patrick Donohue, Wicklow-terrace, Ballybough, was prosecuted for having exposed margarine for sale without having a label attached. Fined £2.

At Redditch, on July 26th, Frederick Kings, grocer, Mount Pleasant, Redditch, was charged with selling, on June 27, one pound of butter and one pound of lard that were adulterated. Mr. Tunbridge defended. A constable deposed to purchasing the articles, and a police-inspector to dividing them into three portions and sending them to be analysed by Dr. Sweete, County Analyst. The fact that the articles were sold was not disputed, but Mr. Tunbridge said, for the defence, that it was without the knowledge of the defendant, who on the previous day was summoned to Worcester to give evidence at a trial, and on the day in question was obliged to go to Bromsgrove on business. His wife, who attended to the business in his absence, was extremely ill, and her sister, Mrs. Parker, came over from Birmingham to nurse her. She attended to the shop during the two days he was absent, and, being ignorant of the business, gave "margarine" and "lardine" instead of the articles asked for. She performed the work voluntarily, and was not in any way engaged as defendant's servant. Mr. Tunbridge raised three technical objections to the charge, the third being that it must be proved that the offence was committed with a guilty intent. After hearing the evidence the Bench decided that there was no intention to deceive on the part of defendant, and dismissed the case.

VINEGAR.

At Glasgow Sheriff Summary Court, on July 28th, before Sheriff Birnie, Miss Margaret Small, grocer, 215, Main-street, Gorbals, pleaded not guilty to a charge of having, on 26th May, sold to Inspectors Inglis and Murray a bottle of "malt vinegar," which, on analysis by Dr. Clark, was certified to be not malt vinegar, but simply coloured acetic acid. Mr. John Lindsay, Assistant Clerk of Police, prosecuted, and Mr. James Barrie, writer, defended. Inspector Murray testified to having asked for a bottle of malt vinegar, and having been supplied with the article, which was analysed by Dr. Clark. He paid 4½d. for it. The bottle was labelled "Glen Oohil Vinegar," and after he had told Miss Small that he was a Food Inspector she offered him a smaller bottle labelled "Hannah's Malt Vinegar," saying that it would be easier carried, but he refused to take it. He did not look at the labels. Miss Small said that she sold very little vinegar, and it was almost all sold in small quantities. Malt vinegar had never been asked for before this occasion, only white and brown vinegar were asked for. She only kept Messrs. Hannah & Co.'s vinegars, and had never ordered malt vinegar. She did not know that there was any difference between these vinegars. Intimation of the case had been given to Messrs. Hannah, and they had left her to fight it out herself, and she had no money to spend on expensive analysts. She offered the small bottle to Messrs. Inglis and Murray before they told her that they were Food Inspectors. After looking at the label they said that they would make the one that they had got do. Mr. Lindsay said he quite admitted that Miss Small sold this vinegar in good faith. The Sheriff said he must hold, from the certificate of Dr. Clark, that this was not malt vinegar. This lady's misfortune was that she did not seem to have known the difference between one class of vinegar and another. That was one of the things which Mr. Fyfe was endeavouring to make merchants know, and thus save the public and respectable traders from imposition. Had this purchase been made after the last case, which must have attracted the attention of merchants who sold malt vinegar, the penalty would have been substantial, but in the circumstances he imposed a fine of 10s.

At Birmingham, on July 28th, Walter Smart, greengrocer, 115, Moseley-road, and Thomas Milward Fincher, druggist, 37, Grange-road, were summoned for selling vinegar not of the nature, quality, and substance of the article demanded, on the 13th April. The cases were before the Bench in May last, but were adjourned pending the recent appeal in another case to Quarter Sessions. In this instance the Analyst's certificate stated that the samples contained 80 per cent. of pyroligneous acid. Mr. Jacques, who appeared for the defendants, said that a test case had been heard at Quarter Sessions, and thoroughly thrashed out. The decision was against the sellers of the vinegar, and the defendants would, therefore, plead guilty. There was no desire to infringe the law, and defendants would take care not to offend again. In the circumstances probably the Magistrates would consider that justice would be met by only ordering the defendants to pay the costs. The defendants were each fined 20s. and costs.

At Liverpool Police-court, on July 26th, a summons was heard against Beatrice Williams, 120, Smithdown-lane, for having sold as vinegar a pint of liquid which on examination by the Public Analyst was found to contain 80 per cent. of acetic acid. A fine of 5s. and costs, together with the Analyst's fee, in all amounting to £1, was imposed. Inspector Baker supported the information.

At Coventry, on July 21st, Thomas Jackson, grocer, Longford, was summoned for selling adulterated vinegar at Longford, on June 15th. The liquid purchased turned out to be acetic acid and water, coloured brown, and not vinegar at all, and defendant said he bought it of Mr. G. Lee, Nuneaton. Mr. Humphries said this acetic acid cost a fifth less than vinegar and was injurious to health. Fined 5s.

On July 24th, at the Wrexham Borough Police-court, the landlords of three public-houses in the Borough were charged with selling adulterated whisky. Evidence in support of the cases was given by Deputy Chief Constable Vaughan, and Mr. Lowe, Public Analyst, Chester. Francis Cutler, of the Dolphin Inn, and Herbert Felton, Hat Inn, were fined £1 and costs each, and Robert Jones, Crown Inn, 7s. 6d. and costs.

At Caerphilly Police-court, on July 25th, Thomas Meyrick, of the Rose and Crown Inn, Eglwysilan, was summoned for selling adulterated whisky, on the 16th of last month. The certificate of the Public Analyst, Mr. W. Morgan, of Swansea, showed that the whisky was 50½ degrees under proof. Defendant was fined 20s. and costs.

WHISKY.

At the Preston Borough Police-court, on July 21st, Thomas Rooney, landlord of the Wool Pack Inn, Back-lane, attended to answer a summons for having refused to supply a sample of whisky, required for analysis under the Food and Drugs Act, to Inspector Marsden. Mr. Hamer, Town Clerk, said he would withdraw the summons. Mr. Blackhurst, who appeared for the defence, said that once a summons was issued no one had the right to withdraw it without the sanction of the Bench. He (Mr. Blackhurst) objected to its being withdrawn, and asked, as he was entitled to do, for its dismissal. The Bench decided to dismiss the summons, and Mr. Blackhurst then asked for costs, remarking that the Corporation of Preston were the prosecutors, and therefore a rich body, and well able to pay. (Laughter.) Costs of witnesses and advocate's fee were allowed. Subsequently an application was made that the order for costs be rescinded, and this was acceded to.

At Ennis, on July 21st, Sergeant McHugh summoned Mr. Wm. Keane, Market-street, for having for sale whisky adulterated by having 30 degrees of water added. Mr. O'Meehan, solicitor, appeared for the defence. The Sergeant proved the purchase of the whisky, and handed in Sir Charles Cameron's analysis—"It was whisky of an inferior quality, and being 30 degrees under proof was an adulterated article under the provisions of the Act." In cross-examination, the Sergeant admitted that he might have said he did not want the "best whisky," and that all he paid for the pint was 2s. The Bench imposed a fine of 20s. and costs of Court. Sergeant McHugh next had Mrs. Margaret Clancy, Abbey Hotel, summoned on a similar charge. Mr. O'Meehan appeared for the defence. The Sergeant proved the purchase, and handed in Dr. Cameron's analysis that the article was "whisky of an inferior quality. Having 37 degrees of water under proof, it is highly adulterated under the provisions of the Act." There was no defence, and the Bench imposed a fine of 30s. and Costs of Court.

At Staines Petty Sessions, on July 24th, Frederick Freeman, of Magpies Hotel, Sunbury, was summoned for selling to Mr. Walter Tyler, Inspector for Middlesex under the Food and Drugs Act, a pint of Scotch whisky which was not of the nature, substance and quality demanded, it being 33 degrees under proof, viz., eight degrees below the limit allowed by the Act. Mr. Lay, who defended, pleaded not guilty. Edward Watkins, assistant to Mr. Tyler, said a barmaid at the Magpies drew the pint of whiskey from a tap. She looked at it after she had put it into the bottle and then emptied it back into the measure with which she had drawn it. Mr. Tyler, who was present, asked to be served from the tap. The barmaid was about to take the spirit from a decanter, but as Mr. Tyler insisted on having some from the tap, she went out and brought Mr. Freeman into the bar. Mr. Freeman said, "I cannot let you have the spirit from the tap, as it was only put down yesterday and has not settled." Mr. Tyler said he heard all that passed between his assistant and the barmaid, and afterwards saw Mr. Freeman, who told him that the whisky had not settled. By Mr. Lay: It was true he insisted on having the spirit from the tap. He did not hear Mr. Freeman say he had told the barmaid not to serve from the tap, as it was not ready for consumption. Mr. Lay said Mr. Freeman had been landlord of the Magpies for 17 years and nothing had been brought against him before. It was very unlikely that Mr. Freeman would sell the spirit to his prejudice. Mr. Freeman, the defendant, said he had given special instructions to Miss Hayes, his barmaid, not to serve from the tap. Miss Hayes was called, as was also the son of the defendant. The latter stated that he had "broken" several gallons of gin and similar quantities of whiskey and added the same quantity of water to each. The Chairman said the Bench did not think there had been any intention of defrauding the public, but at the same time they considered there had been gross carelessness on the part of those who were left in charge of the place, and therefore a fine of 40s. and costs would be imposed.

BRANDY.

At the Derby Borough Police-court, on July 30th, Elizabeth Warrington was summoned by William Wilkinson for selling at her licensed inn, the Grange Inn, Malcolm-street, on the 16th June, certain brandy, which was not of the nature and substance demanded by the purchaser. Mr. Coxon prosecuted, and Mr. R. S. Clifford defended. The offence was that the defendant diluted 100 parts of brandy of the lowest legal strength with 8·6 of water. Mr. Clifford mentioned extenuating circumstances. A fine of 10s. and costs was imposed.—Robert Hunt, of the Pear Tree Inn, was summoned for diluting to the extent of 3·5 a quarter of a pint of rum, on the 13th. He was fined 10s. and costs.

RUM.

At Coventry, on July 21st, Robert Miles, Old Saracen's-inn, Longford, was summoned for selling rum adulterated with 12 per cent. more water than allowed by the Act. Mr. Humphries prosecuted for the County Council, and Mr. Hughes was for defendant. Mr. Salmon, the Inspector, on going to the house on June 15th, saw Mrs. Miles, and on his asking for rum she wanted to go to the cellar for it, but he said he would prefer some from the bar. At last he got a supply from that source. Dr. Bostock Hill certified adulteration to the extent mentioned in the charge. In defence, Mr. Hughes said the house, earlier in the morning, was left in charge of a child, and having occasion to get some rum from the cellar she added water on her own discretion. The father now suffered for the child's folly, he added. The Bench did not consider it a bad case, and fined him 5s. and 11s. 6d. costs.

PEPPER.

At Westminster Police-court, James Bosher, grocer, of 85, Westbourne-street, was summoned at the instance of Harry Herriott, on behalf of the Vestry of the Parish of St. George's, Hanover-square, for on the 24th May, at the above address, unlawfully selling, to the prejudice of his customers, black pepper which had been adulterated by the admixture of 11·5 per cent. of mineral matter, contrary to the statute. Mr. Hitchens prosecuted on behalf of the Vestry. The certificate which was put in was that of Mr. Cassal, the Public Analyst, showing that the pepper contained 11·5 per cent. of mineral matter. The defendant said he thought it seemed a long time, sixty-two days after the purchase, for him to be summoned. He always understood that when nothing was heard for twenty-eight days that it was all right. Mr. Hitchens pointed out that that only applied where the article purchased was perishable. The summons was served on the defendant on the 15th of July. These kind of cases had to go through a regular routine of committees. The defendant remarked that the pepper was taken from a drawer in which there was not much, and no doubt some of the stuff at the bottom of the drawer got into the pepper. Mr. Hitchens: You should keep your drawer clean. The defendant, continuing, said he had bought the pepper from a well-known firm as pure, and it had been sold the same as it had been brought into the shop. Mr. de Rutzen said he did not suppose for one moment that the defendant had deliberately adulterated the pepper, but it had been sent to him with 11 per cent. of mineral matter in it, which practically meant dirt. There would be a fine of 10s., and 23s. costs.

MILK.

At the Bath Police-court, on July 21st, Charles Trickey, 3, Gloucester-place, dairyman, was summoned for selling milk which had been deprived of 18 per cent. of its fat, on the 27th of June. Mr. R. A. Moger prosecuted on behalf of the Sanitary Committee, and Mr. E. B. Titley defended. Mr. Moger called the usual formal evidence, and Mr. Montagu, Inspector, produced the certificate of the analysis as follows:—Cream, 7 per cent.; ash, .74; water, 88·35; fat, 2·35; solids, not fat, 9·30—100·00. I am of opinion that the same is a sample of milk from which 18 per cent., that is nearly one-fifth part of the fat, had been abstracted. This was excellent milk in all respects except the very low amount of fat. In reply to Mr. Titley witness stated that Mr. Trickey had not been proceeded against before, he had only been in business fifteen months. He took some milk at Mr. Carter's the same morning, but he was only cautioned. He could not say whether his milk had the same percentage of cream as Mr. Trickey's. Mr. Carter was admonished because of the low quality of the cream. Mr. Titley having at the opening expressed a wish for Mr. Gatehouse to be personally examined, told Mr. Titley that if he called Mr. Gatehouse he would have to pay his fee. If the Bench called him they would have to provide his fee. Mr. Titley declined to call him on these terms. The Bench then decided to call Mr. Gatehouse, who said that in accordance with the goodness of the milk there should have been 3·5 per cent. of fat. It had above the average of solids. The farmer who kept the cows kept them well. The quality of the milk during the dry weather had been good. By Mr. Titley: The milk had certainly not been watered. If cows were fed on grains and swedes the quality of the milk would be lowered; but if cows were fed on hay and oil cake the milk would be of a better quality than when fed on grass. Mr. Titley raised the point that the defendant had no guilty knowledge, as the milk was sold before he came to the shop. There was no normal standard of milk, and this milk was certainly not adulterated. The defendant, who is a farmer of Weston, said his family had supplied the dairy which he now owned for twenty or thirty years, and no complaint had been made of the quality of the milk. Samples had several times been taken for analysis. His experience was that during the hot weather the cows did not give half as much milk as usual, and it was of poorer quality. The milk in question did not come from his farm. Ada Moore, shop woman for Mr. Trickey, said she bought this particular lot of milk from Mr. Crisp's man at 10d. a gallon, and re-sold it before Mr. Crisp saw it. Oliver Kite, in the employment of Mr. Crisp, who delivered three gallons to Miss Moore, said he was present when the cows were milked. The milk was not tampered with in any way. He delivered cream in the afternoon, but he did not know how it was obtained. Samuel Crisp, farmer, Primrose-hill, said the milk was taken into the city without being taken into the house. It was not tampered with in any way. The cream was taken from the milk lift, and the milk sold as skim. He had no separator on his premises. The Bench, after consultation, decided to convict, and fined defendant £2 and costs.

Richard Cornwall, 22, Lampard's-buildings, a small shopkeeper, was summoned for selling milk which had been deprived of a fifth of its natural fat, on the 27th of June. Defendant could not appear, as he was unwell. His daughter, who represented him, said her father would not be able to attend. Mr. R. A. Moger prosecuted. He said the only difference between this case and the last was that the milk generally was of a poorer quality. Caroline Cornwall said the milk was sold to Mr. Montagu not many minutes after it was received. It was purchased from Mr. Phillips, of Claremont, a milk dealer. They had since left off selling milk. Her father had been fined for selling adulterated milk. Mr. Moger, in consideration of the fact that the defendant had given up selling milk, did not press for a heavy penalty. The Bench gave weight to this appeal, and also bore in mind the illness of the defendant and the small quantity of milk that was sold. Fined 10s. and costs.

At Athestone Petty Sessions, Ernest Albert Wheatley, Witherley, was summoned by G. H. Salmon, Inspector under the Food and Drugs Act, [to answer a charge of selling milk adulterated with water to the extent of 12 per cent. on the 4th inst.—Mr. Salmon said that on the date in question he saw defendant selling milk. Witness followed him into a cottage and purchased some milk, for which he paid 1½d. He then divided the milk into three parts by means of bottles; he gave one bottle to the defendant, at the same time telling him he should send one to Dr. Bostock Hill, County Analyst, and the other he kept himself (produced). The milk had been tested with the result that it was proved to be adulterated to the extent named in the charge. Witness said this was not a case of poorness of milk, but there was clear proof that water had been added intentionally. For his defence Wheatley stated that owing to the dry weather he had been obliged to buy milk from another man purposely to supply the wants of his customers. On the day named he bought a gallon of milk which he added to a small quantity of his own (from which the sample was taken). He expressed his sorrow for what had taken place, but declared his innocence. The Magistrates said they felt disposed to believe his version, and simply fined defendant £1, including costs.

A TECHNICAL OBJECTION.

At Rugby Petty Sessions John Smith, milkman, Victoria-street, New Bilton, was summoned by George Fulsher, Inspector for the Rugby Rural Sanitary Authority, for selling to him a half-pint of milk, not of the quality demanded. Mr. E. C. Peagam appeared for the defendant, who pleaded not guilty. The complainant stated that on the 23rd June he purchased half a pint of milk from the defendant, who was delivering it in the ordinary way. He divided the milk into three parts, one of which he left with defendant, and another he sent to the Public Analyst, who stated that the milk was adulterated with 12 per cent. of added water. By Mr. Peagam: He asked defendant for milk, and nothing further passed between them. By the Chairman: He told defendant it was for the purpose of analysis. In defence Mr. Peagam said the case of Lane v. Collins exactly met the present case in one particular, and that was that the Inspector asked for and was supplied with milk. In the case quoted, milk was asked for and skimmed milk 60 per cent. deficient of butter fat was supplied. The Queen's Bench, on appeal, held that defendant had not committed any offence under that section, as skimmed milk satisfied the demand made. He quoted another case where the Inspector, not having told the defendant that he wanted the milk for public analysis, the case was dismissed by the Jarrow Bench. The Magistrates re-called Mr. Fulcher, who said he told defendant he wanted the milk for analysis by the Public Analyst. Mr. Peagam asked the Bench if that proceeding was fair. The complainant had heard his objections, and now he was called and met them in every particular. A conviction obtained under such circumstances was bound to be upset. Mr. Seabroke (Magistrate's Clerk) said under the Food and Drugs Act Amendment Act, it was not necessary to say that the milk was for analysis by the Public Analyst; it was sufficient to say it was for analysis. Mr. Peagam, quoting from the Amendment Act, said the purchase of milk should be made on delivery, and no attempt should be made to procure it while the milk was in transit along the street. In this case, he said, defendant was not delivering milk, but was only just starting on his rounds. In reply to Mr. Peagam, defendant said he had not delivered any milk in Victoria-street at the time, and did not start delivering until he got into Rugby. He did not deliver milk once in a hundred times at New Bilton. On being again re-called, Mr. Fulcher said the defendant was not delivering milk from door to door. The Bench dismissed the case, the Chairman remarking that both objections were fatal. In the first place it was necessary to tell the defendant that the milk was to be analysed by the Public Analyst, and it was also necessary to take it on delivery, which did not appear to have been the case.

At Hull Police-court, on July 25th, James Elliott, milk dealer, was summoned for selling a pint of milk on the 21st June which was adulterated with 8 per cent. of added water. Inspector Baldock said that he purchased the milk from the defendant's son, who was selling it in Cumberland-street. Defendant said that he had left all the milking to his wife. Fined £5 and costs, he having been previously convicted.—Henry Smith, milk dealer, was summoned for abstracting 16 per cent. of the natural fat from a pint of milk. The Inspector bought the milk from a lad named Ernest Marriott, who was selling for the defendant, on the 21st inst. in Waterworks-street. Fined 40s. and costs.

At Dublin, on July 26th, John McCann, Summerhill-parade, and Mrs. Condan, 38, North Cumberland-street, were each fined £1 for selling milk adulterated with 13 per cent. of water.

BUTTERMILK.

At Dublin, on July 27th, John Kirwan, living at 35, Bow-lane, was summoned by the Public Health Committee for having sold buttermilk adulterated with 40 per cent. of added water. Mr. MacSheehy prosecuted, and Mr. T. P. Coffey represented the defendants. Food Inspector Kane was examined for the prosecution. In answer to Mr. Coffey, he said that after he had bought the buttermilk the defendant's wife told him that it was not for sale, but was intended for a calf which she offered to show the witness. The buttermilk was in a can on the floor of the shop. Mr. Swift asked was butter-

milk adulterated with 40 per cent. of water in addition to the 25 per cent. allowed for churning purposes good nourishment for a calf. Mr. Coffey said that he was told it was. Mr. Swift fined the defendant £3.—Mrs. Mary Byrne, Bow-lane, W., was summoned for selling milk which was adulterated with 13 per cent. of water. A fine of £1 was imposed.

At Wakefield, on July 26th, Harry Woodson, a lad in the employ of Mr. Lumb, Agbrigg Farm, was charged with selling milk alleged to be adulterated to the extent of 10 per cent. of water. The defence was that just before the Inspector took a sample of the milk a gallon purchased from another person had been added to Mr. Lumb's milk. Defendant was fined 10s., and he had £1 2s. to pay for costs.

At Bootle, on July 28th, John Baker, 81, Selwyn-street, Kirkdale, was charged on an adjourned summons with selling milk which had been adulterated with water. The certificate of Dr. Brown, Analyst for Bootle, produced when the case was originally heard, showed that six parts of water had been added to the milk. The summons was adjourned that the sample might be sent to Somerset House, and the certificate from here stated that not less than seven parts of water had been added. Inspector Leslie proved the case, and Mr. Rudd defended. Defendant was fined 5s. and costs, including one guinea for Analyst's fees.

On Monday, July 31st, Thomas Henderson, of White House Farm, was summoned at the Gateshead Police-court (under instructions from the Health Committee) for selling to Wm. Jours, their Food and Sanitary Inspector, a pint of new milk, which was certified by the Public Analyst to be adulterated with 8 per cent. of added water, and in addition 30 per cent. of cream had been abstracted. Four previous convictions were proved against the defendant by the Town Clerk, Mr. Wm. Swinburne (who prosecuted), and he was fined £5 and costs. The presiding Magistrate remarked that milk adulteration was a practice which should be put a stop to, and he warned the defendant that if he came before the Court again on a similar charge they would inflict the full penalty of £20.

At the Brentford Police-court, on July 22nd, John Harris, Royal Express Dairy Company, Boston-road, Hanwell, was summoned for having sold milk adulterated with at least 10 per cent. of added water. The summons had been adjourned at defendant's request to allow of a second sample of the milk being analysed. Mr. Bull, solicitor and Member of the London County Council, who was present on behalf of the Metropolitan and Suburban Milk Supply Association, by whom the milk was supplied to the defendant, asked permission to address the Bench. The Bench declined to accede to the request, as Mr. Bull did not represent the defendant. Mr. Tyler, the Inspector of the Middlesex County Council stated that since the adjournment of the summons he had visited defendant's premises, and had taken a sample of milk at the moment of its delivery by the wholesale dealers. The milk was analysed, and he produced the Analyst's certificate, stating that it was of "inferior quality, and probably adulterated." The milk which was the subject of the present proceedings was certified to have been adulterated to the extent of at least 10 per cent. Defendant said the milk was sold just as he received it. Mr. Bull assured the Magistrates that the Association he represented, and from whom the defendant purchased his milk, had a perfect answer to any proceedings that might be instituted against them, proceeding to show that, for obvious reasons, the Association absolutely declined to be responsible for the milk supplied by them after delivery to their customers. All milk supplied by them was sent up with a warranty; and to ensure its quality, Mr. A. W. Stokes, analyst to Paddington Vestry, regularly tested samples, and the duplicate of that sample taken by the Inspector had been certified by Mr. Stokes to be genuine milk.—The Chairman replied that so far the record was in favour of Mr. Bull's clients. The defendant was fined 20s. and costs.

UN SOUND VEGETABLES.

Charles Steele and Son, of Ealing Dean and Covent-garden-market, were summoned for selling certain vegetables to Phillip Jones, of 41, Heston-street, Deptford, which were unsound and unfit for human food. Mr. Crawshaw defended. Mr. F. T. Strutt, Sanitary Inspector for the Strand Board of Works, deposed that on the 1st July he was shown some cabbages which were purchased from a van belonging to the defendant in Covent-garden-market. The cabbages in question were quite rotten, and were destroyed by order of the Magistrate. Phillip Jones deposed that he purchased the cabbages in question, and afterwards discovered their condition. The defendant did not supply them personally, but the van from which he bought them had the name of Charles Steele and Son upon it. Mr. Crawshaw said the defendant had been engaged in the market for upwards of 40 years, and this was the first complaint of the kind against him. He suggested that Jones had made a mistake as to where he bought the vegetables, as no complaint was made at the time. Two witnesses were called, one of whom somewhat disconcerted the defendant by admitting that several complaints had been made by his customers of cabbages bought from Steele on the same morning. Another witness who testified to the goodness of Steele's cabbages was shown to have bought from a different wagon. Mr. Vaughan said there was no defence to the case. He had seen the cabbages and decided that they were rotten. The defendant was liable to a fine of £50, but he did not think it a case for a heavy penalty. He would be fined £5 and 20s. costs.

ANALYSTS' REPORTS.

TO THE GRAND JURY OF THE COUNTY MONAGHAN.

Mr. Foreman and Gentlemen,—I beg leave to report for your information that I have made the following analyses during the half-year ended on the 10th June, 1893. The following articles were analysed for Sergeants of the Royal Irish Constabulary acting as Inspectors of food:—For Sergeant Doherty, Carrickmacross, one of tea, one of coffee, and one of whisky; for Sergeant Nolan, Monaghan, two of tea, two of whisky, two of milk; for Sergeant M'Donald, Castleblayney, one of milk, one of whisky; for Sergeant Story, Newbliss, one of whisky; for Sergeant Hanbury, Ballybay, three of whisky; for Sergeant Doherty, Carrickmacross, one of whisky; for Sergeant M'Donald, Castleblayney, one of whisky; for Sergeant Roan, Clones, one of wine, two of whisky, one of milk. Of these articles, only two were adulterated—namely, a specimen of whisky sent by Sergeant Nolan, of Monaghan, and one of milk received from the same Sergeant. In the case of the adjacent Counties of Cavan and Fermanagh I have reported on eighteen cases of adulteration in the former, and fourteen in the latter within the last six months. There is less adulteration in Monaghan than was formerly the case. A specimen of the water was analysed for the authorities of the District Lunatic Asylum, Monaghan, and favourably reported upon. A specimen of water analysed for Castleblayney Board of Guardians was found to be of tolerably good quality. A second specimen was found to be an excessively hard water. A sample of the milk analysed for the Carrickmacross Union was slightly below the average quality of that article. A second sample was still poorer. A water analysed for Carrickmacross Union was not quite up to the standard of the best waters. For Dundalk Union, which is partly situated in the County of Monaghan, there were analysed thirteen specimens of tea to see which was best for use in the Workhouse, two specimens of water of good quality, and three specimens of milk—all very poor. For Clones Town Commissioners five specimens of water are being analysed. Total number of specimens received during the half-year, 49.—I am, gentlemen, your obedient servant, Charles A. Cameron, Public Analyst for the County Monaghan.—City Laboratory, 17, Castle Street, Dublin, July 1st, 1893."

NORTH RIDING OF YORKSHIRE COUNTY COUNCIL.

Mr. T. Fairley, Public Analyst, reports:—

My Lords and Gentlemen,—I beg to submit the following report on analyses made for the North Riding during the quarter ending June 30th, 1893. The samples received have been:—milk 3; cheese 2; lard 5; pepper 3; oatmeal 2; arrowroot 1; sugar 1; whisky 3; gin 4; brandy 1—total 25.

Two of the samples of lard from Pickering and one from Northalerton were of low quality containing traces of foreign fat. Three of the samples of gin were adulterated, one from Ampleforth with twenty-eight per cent., one from Malton with eighteen and a half per cent., and one from East Cowton with fourteen per cent. of added water beyond the limits allowed by the Act. A sample of whisky from Richmond was adulterated with twenty-six per cent. of water. The other samples were reported free from adulteration. I am, my lords and gentlemen, your obedient servant, THOMAS FAIRLEY.

INSPECTORS' REPORT.

Quarterly report of James Ward Inspector under Food and Drugs Acts for North Wiltshire:—

Samples Taken.	Adulterated.
Bread 1	0
Butter 3	0
Milk 31	5
Gin 6	1
Whisky 8	2
Lard 1	0
Vinegar 1	1
51	9

Prosecutions 1. Cases standing for hearing this quarter 8. Fines £2 10s. 0d. 17·647 per cent. of samples taken were adulterated.

THE RESULT OF OUR EXPOSURES ANENT BLACKPOOL.

At the last meeting of the Bacup Town Council, Councillor Smith called attention to the fact that Blackpool was not provided with a Public Analyst under the Food and Drugs Act, and asked whether he would be in order in moving a resolution calling the attention of the Local Government Board to the matter. The Town Clerk replied that according to the Act each authority was compelled to provide itself with a Public Analyst. Councillor Smith replied that Blackpool was without such an officer. That, he thought, was a very serious matter, especially to manufacturing districts like Bacup. Each year a large number of people went from such districts as Bacup to Blackpool in search of health and pleasure, and it was important every precaution should be taken by the Blackpool authorities that the visitors should be provided with pure and wholesome food. He believed it was a fact that several visitors to Blackpool from this district had returned home ill. The Town Clerk said he would write to the Town Clerk of Blackpool calling his attention to the fact that according to statute that town ought to be provided with a Public Analyst, and pointing out that several visitors from this district had suffered from illness. Councillor Smith said that would answer his purpose.

DISEASED MEAT.—TWO MONTHS' IMPRISONMENT.—At Leigh Police-court, on July 31st, William Smith, pig breeder, Tyldesley, was charged with exposing for sale a diseased pig. The animal had been partly dressed when seized by the Medical Officer and the Sanitary Inspector to the Tyldesley Local Board. The defendant denied that the pig was intended for human food, but the Magistrates considered the case proved, and sentenced Smith to two months' imprisonment. Leave was granted to appeal.

LOW QUALITY MILK.

At West Riding Court, Sheffield, on August 1st, George Ibbotson, farmer, Wortley, was summoned for selling on June 27, a quantity of new milk which was not of the quality required. Inspector J. Wilson, Rotherham, met the defendant at Oughtibridge on June 27, and took a sample of his milk. It was submitted to the public analyst, Mr. A. H. Allen, who found that the milk had been deprived of a portion of its natural cream, or butter fat, either by skimming or other means. The deficiency amounted to one-third of the cream originally present.—Defendant was fined £1 and costs.

RADNORSHIRE COUNTY COUNCIL.

At the last meeting the Clerk read a report from Mr. Horace Swete, the County Analyst, stating that eight samples were sent him for analysis during the quarter, two of which were adulterated. Mr. Harding remarked that one of these cases cost £8 8s. for the prosecution. The report was adopted.

MORE POISONING BY TINNED FOOD.

Purchasers of tinned edibles should be careful, when investing in salmon, to have it opened, and profit by the experience of a Kidderminster man, living in Lea-street, who, with his family, numbering 10 in all, attribute a serious illness to eating tinned salmon. It seems that two tins of salmon were purchased at an establishment in the town, and their contents eaten for dinner on Saturday, and that three hours afterwards the whole family who had partaken of the fish were seized with violent purging and sickness. Indeed so severe a form did the sickness assume that the doctor was fetched at midnight, and but for his aid it is possible that another tale might have had to be told. At any rate several of the patients were in bed for days while others were practically recovered on the following morning. The father and two of the sons, who consumed the contents of one of the two tins between them, seemed to be worse than the other seven, between whom the second tin was divided. The two tins of salmon were both of the same brand, and tinned in Alaska, but outwardly there was not the slightest indication that the contents were not what they should be, so that it would be hard to condemn the vendor for an offence of which he was absolutely innocent. The Sanitary Inspector (Mr. Cowderoy) paid a visit to his shop, and after opening a number of tins, could find no fault with them. No proceedings could therefore be taken against the shopkeeper.

LARD OR LARDINE.

A CURIOUS DIFFICULTY.

At the Hollywell Sessions, on August 1st, Mr. Superintendent Hughes, Inspector under the Food and Drugs Act, summoned Japheth Jones, a grocer, of Whitford, for selling a certain article as lard which contained 22 per cent. of cotton-seed oil. Mr. R. Bromley defended. The prosecutor stated that on the 24th June last he went into defendant's shop, and purchased 1lb of lard, and while doing so the defendant's wife said, "We sell this as lard, but I do not think it is as good as we usually sell as lard." He told her the samples were for analysis. After he and the other officers had left the shop, defendant ran after them, and said his wife had made a mistake, that it was "lardine" and not lard that she had sold, and showed them the lid of a bucket with "lardine" painted across. In answer to Mr. Bromley, prosecutor said he had not heard of "lardine" before. He was sure that she had not said "lardine" and he had mistaken it for lard on account of the term being strange to him. Mr. Bromley, for the defence argued that the indication of the commodity was sufficiently shown by the label on the bucket, by the paper it was usually wrapped in having the word printed on it, and also by its being verbally called "lardine." There was no attempt to defraud the public. The lid of the bucket was not seen by the officer, though it was near to him when in the shop. In support of his contention he called the defendant and his wife, who said they had sold lardine for some months, and a Mrs. Collins produced her pass-book with entries "lardine" therein. The price also was pointed out as only 6d., whereas pure lard was 8d. and 9d. per lb. In this case the Margarine Act did not operate, as the word "lardine" was not even coined at the time of the Act being passed. After an extended examination the bench retired, and on returning into court the Chairman said the Bench were of opinion that the defendant's wife forgot to tell Superintendent Hughes that the commodity was lardine, and not lard, when purchasing, and they did not think it a case for any penalty. In fact, if the defendant would agree to pay the costs the Bench would not convict. The decision of the Bench was accepted, and the costs, amounting to 20s. 6d., were paid.

HOLLAND COUNTY COUNCIL.

At the last meeting the County Analyst, Mr. C. H. Southwell, Boston, reported that he had analysed seventeen samples (eight of milk, two of whisky, two of gin, one of brandy, and four of sweets), during the quarter, and had found four samples (two of milk, one of whisky, and one of gin,) to be adulterated. The County Analyst made in his report the following observations. Three samples of milk were of poor quality, in addition to two samples adulterated. Five samples of spirits were submitted for analysis, two of which were found to be admixed with water—an exceptional high rate of adulteration. Four samples of sweets known in the trade as “dry” goods were examined and found to consist of sugar, a small quantity of potato starch flavoured with oil of peppermint, or artificial flavouring essences. They were coloured with vegetable colouring matter or aniline dyes, chiefly the latter, but in such small quantities as to be harmless. No poisonous colouring matter was to be found. On the presentation of this report, Mr. Atton asked that it might be stated whether the samples submitted to the Analyst by the police were taken in the north or south part of the county. The Chairman replied that in Committee it had been thought advisable not to indicate in detail where the samples were obtained. Councillor Atton said that the cases were reported in the newspapers when they came before the police, so that there could be no objection to the Council being supplied with the information he asked for. Councillor Hunn thought it was not desirable after the cases had been exposed in the County newspapers to print the names and send them round to all the Councillors. Alderman Barrell remarked that there was something to be said on the other side, and that was whether the Council should take upon themselves the duty of acting as advertising agents, that was what it would amount to. Councillor Atton, on the advice of the Chairman, proposed that the matter be referred for the consideration of the General Purposes Committee. Councillor Hall seconded, and the proposition was carried by sixteen votes to seven.

WEST SUSSEX CITY COUNCIL.

At a meeting on June 22nd, Mr. Otto Hehner, Public Analyst, reported that during the past quarter 16 samples of whisky, 18 of milk, and 17 of butter, a total of 51 samples, were analysed. Of the 16 samples of whisky, six, or 37·5 per cent. were watered to a greater extent than was permitted by the Sale of Food and Drugs Amendment Act. In four cases certificates of adulteration were given, while in two cases the addition of water beyond the legal limit was so small, that he thought it sufficient to recommend that the vendors should be warned. Thus spirits, in the county, as elsewhere, remained the most usually adulterated articles, partly, doubtless, because watering was readily practised, and partly on account of the profitable nature of the adulteration. He was, however, glad to be able to report that the whole of the samples of milk and of butter were quite genuine, the milk being of high quality as regards percentage of cream and of other valuable constituents, although during the past trying season the inducement to lengthen milk by water must have been very great. Earl Winterton moved the approval of the Report of the Food and Drugs Act, and also the reception of the Report of the Public Analyst. Councillor Wilberforce seconded the motion, which was agreed to.

BIRMINGHAM.

The following is a list of the articles analysed for the three months ending May 25th:—Milk, 91 samples; butter, 31; Bread, 24; Ale, 18; coffee, 12; sugar confectionery, 12; lard, 10; flour, 9; oatmeal, 9; vinegar, 8; arrowroot, 6; mustard, 6; pepper, 6; bicarbonate of soda, 4; cream of tartar, 4; tartaric acid, 4; cheese, 4; sugar, 1; total, 259. A large proportion of the samples of milk, viz., 27 out of 91, or nearly 30 per cent., proved to be adulterated. In five instances water had been added, in 14 cream had been abstracted, and in 8 cases the milk had been both watered and skimmed. In addition to these samples, 7 others were of suspiciously low quality. One sample of butter out of 31 had been tampered with. It contained 5 per cent. more water than is reasonable in a butter. Four samples of cream of tartar and four of tartaric acid contained traces of lead. In the majority of the cases of adulteration those guilty of defrauding the public, were either cautioned by the Health Committee or no action was taken.

CORRESPONDENCE.

THE INCORPORATED SOCIETY OF INSPECTORS OF WEIGHTS AND MEASURES.

To the EDITOR of FOOD AND SANITATION.

Sir,—My attention has been called to a statement in your paper, that no Food and Drug Inspector had been asked to appear before the Select Committee of the House of Lords on the question of marking, etc., of foreign imported food, etc.

This, I am pleased to say, is not correct, as at the invitation of the chairman (Lord Onslow) this Society were invited to send representatives, and Mr. Walter Tyler, of the Town Hall, Brentford, did attend on behalf of the Society, and gave valuable evidence before the Committee. I shall be glad, therefore, if you will kindly publish this letter in your next issue. Thanking you in anticipation.—I am, faithfully yours,

Guildford, July 29th, 1893.

CHAS. J. MARTIN,

Secretary.

[We are gratified to learn that the House of Lords' Committee showed even this modicum of intelligence, but at the time the paragraph to which Mr. Martin's letter refers was written, early in June, we had no evidence of even one Food and Drugs Act Inspector having been called by the Committee, and we have not yet heard of any Public Analysts being called, although ignorant

M.P.'s secretaries and poseurs innumerable have given the Committee yards of twaddle which will be printed at the public expense, and be deservedly read by nobody. For fatuous incapacity it is difficult to tell which is the worse, our local parliaments or our Imperial one. As Dickens says—"Your Nobles and Right Honourables are first-rate men. Yes, and so is a goose a first-rate bird. But I'll tell you this about the goose—you'll find his natural flavour disappointing without stuffing." It is bad enough that the public well-being should be in the hands of a horde of Right Honourable and Noble Geese, who are born to be stuffed, are stuffed, and will always require stuffing; but it is worse and very irritating when the stuffing put into them is of the flavourless wishy-washy ignorant kind thrust into the gobs of the noble geese by professors who have no practical knowledge of adulteration, fraudulent marking, or its suppression, or by private secretaries of the noble this or that, who know as much about the food question as a pig knows of dancing a hornpipe. If any of our readers are curious to know the depths of idiocy to which our most noble local and Imperial rulers can descend, we would refer them to the records in our leading article.—EDITOR.]

To the EDITOR of FOOD AND SANITATION.

Sir,—A Parliamentary Committee may be appointed to consider the defects in the adulteration laws. Let us hope that a searching investigation will be made, and that, above all, experience of Medical Officers of Health, Public Analysts and Food Inspectors will be obtained. Unless the knowledge be utilized of these officials—especially the latter—whose daily experiences in the purchase of food and of proceedings in the police courts have shown them the omissions and inconsistencies by means of which the proverbial “coach and four” can be driven through the Act, no efficient Act can be drawn to frustrate the knavish tricks now generally resorted to by unscrupulous dealers. The Act must be compulsory, and so must its execution, as also the appointments of Analysts and Inspectors. The numerous valuable suggestions that can be given by officials in the science and practice of fraud detection, should be fully availed of.

Yours truly,

FOOD INSPECTOR.

BOAKE ROBERTS' SULPHUR DIOXIDE.

To the EDITOR of FOOD AND SANITATION.

Dear Sir,—We beg to say that to meet the requirements of some Sanitary authorities, we now put up the Sulphur Dioxide in small cylinders containing 12 ozs. each for use in small rooms, but the great bulk of our output remains in the original cylinders containing 20 ozs.

We are glad to say that the Sulphur Dioxide meets with increased favour, the demand is not only increasing from new sources, but those who use it write of it in the most favourable terms.—Yours faithfully,

Chemical Works, Stratford,

London, E.—July 24th, 1893.

A. BOAKE ROBERTS & Co.

AGRICULTURAL IMPORTS.

Account showing the quantities of certain kinds of agricultural produce imported into the United Kingdom, in the week ended July 29th, 1893, together with the quantities imported in the corresponding week of the previous year:—

	Quantities.	
	1892.	1893.
Animals living:		
Oxen, bulls, cows, and calves	Number 18,018	6,168
Sheep and lambs	" 2,874	2,985
Pigs	" 401	—
Fresh meat:—		
Beef	Cwts. 45,494	41,896
Mutton	" 19,320	62,772
Pork	" 767	1,774
Salted or preserved meat:—		
Bacon	" 70,246	55,601
Beef	" 7,918	2,953
Hams	" 22,258	16,979
Pork	" 6,470	5,188
Meat unenumerated, salted and fresh	" 2,280	8,492
Meat preserved, otherwise than by salting	" 9,403	17,474
Dairy produce and substitutes:—		
Butter	" 52,102	45,548
Margarine	" 20,973	18,214
Cheese	" 88,662	72,879
Condensed milk	" 6,620	9,116
Eggs	Gt. Hndr. 177,053	193,198
Poultry and Game	Value £ 1,804	1,813
Rabbits, dead (not tinned)	Cwts. 11	410
Lard	" 25,404	18,552
Corn, Grain, Meal and Flour:—		
Wheat	" 1,082,505	1,708,178
Wheat Meal and Flour	" 875,002	865,617
Barley	" 174,189	958,840
Oats	" 284,674	442,779
Pease	" 32,895	29,778
Beans	" 19,555	31,882
Maize or Indian Corn	" 986,553	704,911
Fruit, Raw:—		
Apples	Bush. 25,974	41,981
Oranges	" 4,997	1,568
Lemons	" 11,756	8,098
Cherries	" 89,888	90,514
Plums	" 82,609	75,270
Pears	" 8,079	21,954
Grapes	" 45,998	62,219
Unenumerated	" —	15,497
Hay	Tons. † 865	2,615
Hops	Cwts. 865	2,615
Vegetables:—		
Onions, raw	Bush. 48,882	34,158
Potatoes	Cwts. 55,598	27,184
Unenumerated	Value £ 81,957	36,769

* Not separated in 1892.

† Not rendered in previous year.

Statistical Office, Custom House, } T. J. PITTAR.
London, July 31st, 1893.

End of
LIBRARY
WELLS

The following is extracted from "THE ANALYST," for March, 1893.

"THE COMPOSITION OF MILK AND MILK PRODUCTS.

25,931 SAMPLES were Analysed in 1892, in the LABORATORY of the

AYLESBURY DAIRY COMPANY, LTD.,

St. Petersburg Place, Bayswater, London, by M. H. Droop Richmond, F.I.C., F.C.S.,

Member of the Society of Public Analysts, the Company's Resident Analyst.

The Samples comprised :—

23,865 of MILK, 566 of CREAM, 8 of BUTTER-MILK, 78 of BUTTER,
24 of WATER, and 22 of SUNDRIES."

MALT VINEGARS.

WE guarantee all the Vinegars we are sending out to be brewed from MALT and BARLEY only—without the addition of RICE, MOLASSES or SUGAR—and that no description of ACID is used in the production of our Vinegars.

Brewery, Birmingham.

FARDON'S VINEGAR Co., Limited.

EDWARDS' DESICCATED SOUP.
IN FOUR VARIETIES.

BROWN—Beef and carefully selected garden Vegetables.

GRAVINA—EDWARDS' Gravy Powder.

WHITE (VEGETABLE)—A purely Vegetable Preparation.

TOMATO—Containing all the valuable, agreeable, and health-giving properties of the fresh tomato, perfect and unimpaired.

Sold by all Grocers, &c. Cookery Book, post free. SOLE MANUFACTURERS—

FREDK. KING & CO., Ltd., 3-6, CAMOMILE STREET, LONDON, E.C.

BANCROFT'S LARD.

BOAR'S HEAD BRAND.

ABSOLUTELY PURE.

ONE We guarantee our Lard to be perfectly free from water or any other adulteration. We only make quality, viz. :—

ABSOLUTELY PURE LARD.

BANCROFT & CO., Ltd., Lard Refiners, LIVERPOOL.

